ORDER NO. VRD8810M607

Service Manual

Editing Video Cassette Recorder

Panasonic S-VHS 625 VHS PAL Hi-Fi

AG-7500-A -B -E -EP

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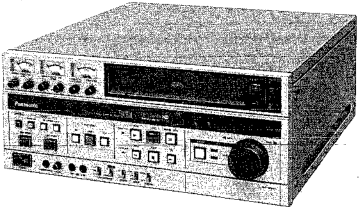

SPECIFICATIONS

ITEM	SPECIFICATION
Power	Source: AC 110/120/220/240 V (selectable)
	Consumption: Approx. 96 W Approx. 100 W (with AG-A750)
Video	Head: 2 rotary heads, helical scanning system 49 μm (NOR), 70 μm (SS) 2 flying (rotary) erase heads 47 μm (FE)
	Luminance: FM azimuth recording
	Colour signal: Converted subcarrier phase shift recording
	Input Level: VIDEO IN (BNC): 1.0 Vp-p 75Ω unbalanced S-VIDEO IN (4P DIN): Y; 1.0 Vp-p 75Ω unbalanced C; 0.3 Vp-p (burst level) 75Ω unbalanced DUB IN (7P): Chroma level; 0.9 Vp-p (cyan level), 1 kΩ unbalanced Luminance level; 1.0 Vp-p, 1 kΩ unbalanced Composite sync (BNC): 4.0 Vp-p (negative pulse), 75Ω unbalanced Capstan override (PHONO)
	Output Level: VIDEO OUT (BNC): 1.0 Vp-p 75Ω unbalanced S-VIDEO OUT (4P): Y; 1.0 Vp-p 75Ω unbalanced C; 0.3 Vp-p (burst level) 75Ω unbalanced DUB OUT (7P): Chroma level; 0.9 Vp-p, 1 kΩ unbalanced Luminance level; 1.0 Vp-p, 1 kΩ unbalanced DOC OUT (BNC): 0.5 Vp-p, 75Ω unbalanced
Video	Signal-to-Noise Ratio (VHS): B/W; 45 dB Colour; 45 dB
	Horizontal Resolution: B/W; more than 400 lines (S-VHS) 300 lines (VHS) Colour; more the 400 lines (S-VHS) 240 lines (VHS)
Audio	Head: Normal Audio/Control: 1 stationary head HD Audio: 2 rotary heads (35 μm) Erase: 1 full track erase 2 selectable audio erase tracks for editing
	Track: 2 tracks (Normal-stereo), 2 channels (HD sound-stereo)
	Input Level: LINE IN (XLR): +4, 0, −6 dBs, 600Ω balanced MIC IN (1/4" phone × 2): −60 dBV, 4.7 kΩ unbalanced
	Output Level: LINE OUT (XLR): +4, 0, −6 dBs, 50Ω balanced AUDIO MONITOR (phono): 0 dBV, 600Ω unbalanced HEADPHONES: −60 dBV ~ −20 dBV, 8Ω unbalanced
	Frequency Response: Normal: 50 Hz ~ 12 kHz HD Sound: 20 Hz ~ 20 kHz
	Dynamic Range: HD Sound: 90 dBV
	Signal-to-Noise Ratio: 48 dBV (Normal NR ON)
Time Code	Input Level (phono): 1.0 Vp-p, 10 kΩ unbalanced
	Output Level (phono): 2.4 Vp-p, low impedance unbalanced

(Please see reverse side)

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

Panasonic

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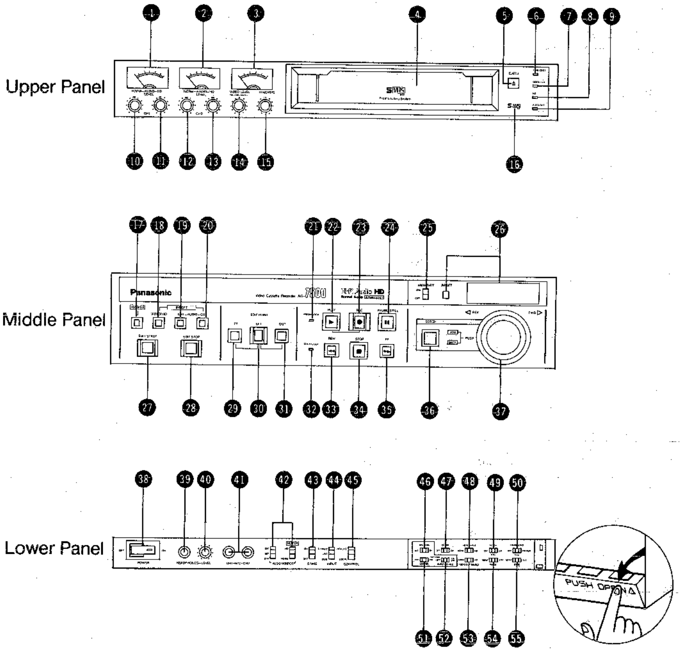
CONTROLS AND THEIR FUNCTIONS

Front



① **Audio (CH1) Level Meter**
The meter indication can be switched between Normal/HD by means of Audio Monitor Selector ㊷.

② **Audio (CH2) Level Meter**
The meter indication can be switched between Normal/HD by means of Audio Monitor Selector ㊷. If you set Audio CH2 Selector ⑦ (Rear Panel) to the "TIME CODE" side, you cannot use normal audio CH2. In this case, if you set Audio Monitor Selector ㊷ to the "NORM" side, the audio (CH2) level meter will indicate the existence of a time code signal if present.

③ **Video Level/Tracking Meter**
When the unit is in the playback mode, this meter functions as a tracking meter. In other modes, it functions as a video input level meter.

④ **Cassette Holder**

⑤ **Eject Button**
Press this button to remove the cassette tape.

⑥ **Time Code Lamp**
This lamp lights when the Audio CH2 Selector ⑦ (Rear Panel) is set to the "TIME CODE" side.

⑦ **Dolby NR Lamp**
This lamp lights when you set Dolby NR Switch ㊻ to "ON".

⑧ **HD Lamp**
This lamp lights during HD Sound recording, or playback of a tape which contains HD-recorded Sound.
It also lights when HD Recording Selector ㊼ is set to "ON" during E-E picture.

⑨ **Auto OFF Lamp**
This lamp lights if moisture condenses inside the unit. It flashes when something is wrong with the tape transport (such as tape slack). If this lamp lights or flashes, the unit will stop.

⑩ **Audio (CH1) Normal Audio Level Control**
Adjust the recording level of Normal Audio CH1 by turning this control while observing the meter ①.

⑪ **Audio (CH1) HD Sound Level Control**
Adjust the recording level of HD Sound CH1 by turning this control while observing the meter ①.

⑫ **Audio (CH2) Normal Audio Level Control**
Adjust the recording level of Normal Audio CH2 by turning this control while observing the meter ②.

⑬ **Audio (CH2) HD Sound Level Control**
Adjust the recording level of HD Sound by turning this control while observing the meter ②.

⑭ **Video Level Control**
MAN: Pull this knob. Adjust the video input level by turning this knob while observing the meter ③.
AGC: Push this knob. The record level is automatically adjusted.

⑮ **Tracking Control**
When performing normal playback of a recorded tape, turn the Tracking Control until the reading on the meter ③ reaches maximum.

⑯ **S-VHS lamp**
This lamp lights up when the unit is in the following mode;
- Playing back the tape recorded in the S-VHS mode.
- The S-VHS Selector ㊽ is in the "ON" position during recording S-VHS tape or E-E mode.

⑰ **Assemble Button/Lamp**
When you wish to perform assemble editing, press this button to put the unit in the assemble mode. The button contains a lamp which lights when the button is pressed (ON) and goes out when the button is pressed once again (OFF).

⑱ **Insert Video/HD Button/Lamp**
When you wish to perform insert editing of a video signal and HD Sound, press this button to put the unit in the insert video/HD mode. The button contains a lamp which lights when the button is pressed (ON) and goes out when the button is pressed once again (OFF).

⑲ **Insert Audio CH1 Button/Lamp**
When you wish to perform insert editing of normal audio CH1, press this button to put the unit in the insert audio CH1 mode. The button contains a lamp which lights when the button is pressed (ON) and goes out when the button is pressed once again (OFF).

⑳ **Insert Audio CH2 Button/Lamp**
When you wish to perform insert editing of Normal Audio CH2, press this button to put the unit in the insert audio CH2 mode. The button contains a lamp which lights when the button is pressed (ON) and goes out when the button is pressed once again (OFF).

㉑ **Frame Lock Lamp**
This lamp lights when the CCIR standard signal is synchronized with the frame during playback or recording.
Before performing editing, confirm that this lamp is lit. (Refer to Frame Servo Switch ㊿.)

㉒ **Play Button/Lamp**
This button is used during tape playback.
(If you press this button together with Record Button ㉓, the unit will go into the recording mode.)
The lamp lights during playback or recording.

㉓ **Record Button/Lamp**
Use this button when you wish to make a recording. When the button is pressed, the lamp will light.

㉔ **Pause/Still Button/Lamp**
If you press this button, the lamp will light and tape travel will stop. By pressing it once again, the lamp will go out and the tape travel will start again.
Use this button to create a still picture during playback or to pause during recording.

㉕ **Memory Switch**
If you set this switch to "ON", the tape will automatically stop at the point corresponding to "0:00:00:00" on the tape counter when the unit is put in the fast forward or rewind mode.

㉖ **Tape Counter/Reset Button**
By pressing the Reset Button, the reading on the tape counter will become "0:00:00:00". Also, the editing point will be reset. When tape travel starts, the counter will provide an indication of the tape travel in Hours : Minutes : Seconds : Frames. When the tape goes past the "0:00:00:00" point and starts to be rewound, the indication on the tape counter will be prefixed by a minus (−) sign.

㉗ Edit Start Button/Lamp

This button is used for performing editing (assemble editing or insert editing) after the editing point is set. While editing is taking place, the lamp lights; while a search is taking place at the edit start point and also when the tape returns to the edit end point the lamp flashes.

If you press the Edit Start Button without setting the edit point, you can start editing from the point where you pressed the button.

㉘ Edit Stop Button

If you press this button during editing, the editing will be finished at the point where you pressed the button.

㉙ Edit Point In Button/Lamp

By pressing this button together with the Set button, you can set the edit start point.

When the button is pressed, the lamp will light, indicating that the edit start point has been set. By pressing the In Button after setting the edit start point, the edit start point will be displayed on the tape counter. Also, by pressing the Out Button together with the In Button, the editing time will be displayed on the tape counter.

After the end of editing, the lamps of the In Button and Out Button will flash simultaneously, indicating that editing has ended.

㉚ Editing Point Setting Button

By pressing this button together with the In or Out Button, you can set the editing points.

㉛ Edit Point Out Button/Lamp

By pressing this button together with the Set Button, you can set the edit end point. When the button is pressed, the lamp will light, indicating that the edit end point has been set. By pressing the Out Button after setting the edit end point, the edit end point will be displayed on the tape counter. Also, if you press the In Button and Out Button simultaneously, the editing time will appear on the tape counter. After the end of editing, the lamps of the Out Button and In Button will flash simultaneously, indicating that editing has ended.

㉜ Servo Lock Lamp

This lamp lights when the servo circuit is synchronized with the reference sync signal.

㉝ Rewind Button/Lamp

Use this button when you wish to rewind the tape. While the tape is being rewound, this lamp is lit.

㉞ Stop Button/Lamp

By pressing this button, the entire unit will stop and the lamp will light.

㉟ Fast Forward Button/Lamp

Use this button to move the tape forward at high speed. While the tape is traveling forward at high speed, the lamp will be lit.

㊱ Search Button/Lamp

By pressing this button, the lamp will light and the unit will go into the search mode. By pressing this button once again during a search, the lamp will go out and the unit will revert to the normal playback mode.

㊲ Search Dial

Use this button to search for the editing points.

㊳ Power Switch

By pressing this switch "ON", power will be supplied to the unit. Also, the audio CH1, CH2, and video/tracking meter lamps will light, and the reading on the tape counter will be reset to "0:00:00:00". By pressing this switch "OFF", the power will be cut off.

㊴ Headphone Jack (1/4" phone)

If you connect 8-ohm rated impedance stereo headphones to this jack, you can monitor the audio from either CH1 or CH2, or both channels, in accordance with the setting of the Audio Monitor Selector.

㊵ Headphone Level Control

For adjusting the output level of the headphones.

㊶ Microphone CH1/CH2 Jacks (1/4" phone)

For connecting external microphones.

㊷ Audio Monitor Selector

These switches are used for selecting the type of audio which is output from Audio Monitor Output Jack ⓭ (Rear Panel) and Headphone Jack ㊴, and the channel to be monitored. The indication of Audio Level Meter ❶, ❷ can be switched between Normal/HD by means of the meter side of these selectors.

㊸ S-VHS Selector

ON: VHS tape and S-VHS tape are automatically distinguished, and recording is done in the corresponding mode.

OFF: S-VHS tape is recorded in VHS mode.

㊹ Input Signal Selector

This switch is used for selecting the video input signal.

㊺ Control Selector (Remote/Local)

REMOTE: Set the switch to this position when connecting a controller to the Remote Control Connector ⓯ (Rear Panel). When the switch is in this position, the operation buttons on the unit will be rendered inoperative, and the unit will be controlled by the remote controller. Also, the counter cannot be reset. (The Stop Button and Eject Button will function, however.)

LOCAL: Set the switch to this position when using the unit independently.

Note:

When you change the setting of this switch from local to remote, the editing points will be reset.

㊻ Dolby NR Switch

By setting this switch to the "ON" position, the Dolby NR System will operate.

㊼ HD REC Switch

ON: HD sound and normal sound are recorded.

OFF: Only normal sound is recorded.

㊽ HD REC INPUT Selector

NORM: Normal input signal is recorded on HD track.

HD: HD input signal is recorded on HD track.

㊾ NOTCH Selector

Normally use the selector in the "OFF" position.

- Place this selector to "ON", when playing back S-VHS tapes recorded on other VTRs or when chrominance noise appears in the luminance signal (Y/C signal is not separated completely).
- When the tapes recorded through the S-VIDEO input connector or recorded on the AG-7500 are played back, set the selector to the "OFF" position. More clear picture can be obtained.

㊿ Frame Servo Selector

OFF: Recording or editing input signals other than CCIR standard signals.
Set the selector to this position when performing insert editing or assemble editing onto a tape that has been recorded using a VTR which does not have a frame servo function.
When the selector is put in this position, Frame Lock lamp ㉑ will go out.

FRAME: Recording or editing CCIR standard signals. When the frame servo is applied, Frame Lock lamp ㉑ will light.

COLOUR: Recording or editing CCIR PAL COLOUR signals. When the colour frame servo is applied, Frame Lock lamp ㉑ will light.

(51) Audio Limiter Switch

By setting this switch to the "ON" position, you can record the Normal Audio signal without distortion even if the audio input momentarily exceeds the reference level. (Normal Audio recording only)

(52) Audio Mix Rec Selector

ON: Normal CH1 and CH2 inputs are mixed and recorded on normal CH1 audio track.

OFF: Normal CH1 and CH2 are recorded separately.

(53) Audio Output Selector

NORM: Normal Audio is output from Audio Output Jacks ㉒, ㉔.

HD: If HD Sound is recorded, HD Sound will be output. If HD Sound is not recorded on the tape, Normal Audio will be automatically output from Audio Output Jacks ㉒, ㉔.

(54) Image Selector

NORM: Normally place the selector in this position.

DETAIL: More clear picture will be obtained than "NORM".
However, the S/N becomes inferior.

EDIT: Place the selector to this position when editing.
However, the S/N of both source and editor VTRs becomes inferior.

(55) Sync Selector

This selector is used when recording or playing to select one of two types of sync signals (normal or external).

(Continued from cover page)

ITEM	SPECIFICATION
Television System	CCIR Standard (625 lines, 50 fields) PAL Colour Signal
Tape Speed	23.39 mm/s (Normal)
Tape Format	SVHS tape, VHS tape (Tape width 1/2" (12.7 mm))
Record/ Playback Time	180 min. with NV-SE180E
FF/REW Time	About 3 min. with NV-SE180E
Operating Condition	Temperature: 5°C~40°C Humidity: 35%~80%

ITEM	SPECIFICATION
Dimention	430(W) × 176(H) × 453(D) mm
Weight	Approx. 21 kg
Standard Accessories	S-VIDEO Cable (4 P) (VFA0055)
Optional Accessories	S-Video Cable (4 P) (AG-C71...5 m) (AG-C70...3 m) Dubbing Cable (7 P) (AG-C65) Rack Mount Adaptor (AG-M750)

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

INTRODUCTION

This Service Manual contains all the technical information which will allow service personnels to understand and service this Panasonic SVHS 625 editing video cassette recorder model AG-7500. By the use of the S-VHS system, a sharp picture quality with high resolution is obtained, and advanced editing by easy operation is realized by the introduction of high reliability mechanisms. Added to the basic VHS format, these features make the AG-7500 an ideal unit for business, education, sales and training applications.

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FEATURES

1. Amorphous heads and high quality picture

Picture quality has been improved by the use of the S-VHS system and the amorphous heads. Resolution of over 400 lines and less noise are realized in the following conditions.

- FM carrier frequency: White peak; 7 MHz
  Sync tip; 5.4 MHz
- Installation of sub-emphasis circuit
- White clip level: 210 %
- Use of S-VHS tape

2. Use of digital YC separator circuit

- Perfect YC separation is possible even in noncorrelating portions.
- Because of burst PLL system, non-standard signals can be separated, too.
- As digital signals are process, YC can be separated with small temperature or characteric changes by a stable operation.

3. Time Code Editing

The unit allows the execution of time code editing when this unit is connected to the AG-A750 Editing Controller. Synchronization is also possible at the Edit IN point by the Capstan Override Connector.

4. High precision linear audio editing timing

When insert or assemble editing, it is possible to edit at the linear audio editing timing of ±1 frame with respect to the video recording timing. (When using AG-A750.)

5. Automatic back space function

By the automatic back space function, video and audio data without blank portions can be recorded by splicing.

6. H-aligned framing servo

Sometimes, when editing video signals conforming to the CCIR standard, frame phase misalignment or horizontal distortion occurs between adjacent edited portions. This unit employs a framing servo to align the frames, thus eliminating such errors at the edit start and end points.

7. Flying erase-based editing

The adoption of a "rotary erase head" makes it possible to achieve top-grade electronic editing without noise or frame mis-synchronization.

8. Dual audio channel·Dolby* NR system

Because there are two normal audio tracks, stereo or bilingual programmes can be recorded and played back. The sound quality is further improved due to the built-in Dolby NR system.

* 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

9. Recording and playback of Hi-Fi sound (HD sound) and assemble editing

You can record and play back HD Sound even without a video input signal. You can also independently record a total of four channels, that is, HD Sound (CH1/CH2) and Normal Audio CH1/CH2.

10. JOG/SHUTTLE search function using dial

A programme segment on the tape can be rapidly and accurately found by using the SHUTTLE search in which the tape speed is varied between 0 and 10 times the normal speed, or the JOG search in which the tape speed is varied in accordance with the rotational speed of the dial.

11. Field still function

This function provides attractive still pictures with minimal jitter.

12. Rack mounting possible due to front loading

The unit is a cassette tape insertion type employing front loading, hence it can be easily installed in an IEC standard 19-inch rack.

13. Editing and dubbing connectors

Special connectors designed for dubbing provide improved picture quality when dubbing or editing between video recorders.

14. Time code recording and playback

The EBU time code can be recorded and played back on the audio CH2 track.

15. Independent editing

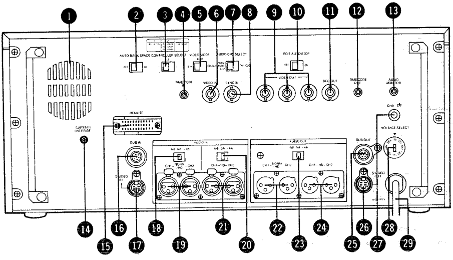
When the AG-7500 is used independently as an editor and the edit start and end points are memorized in the tape counter, editing automatically takes place between those points.

16. System editing

An editing system can be configured by connecting the AG-7500 to an Editing Controller.

- Up to three source (playback) units can be connected simultaneously by using a Remote Search Controller (NV-A505, option) and Multi-Source Switcher (NV-J500, option).
- It is possible to configure a system by connecting the unit to the AG-A750, AG-A650, NV-A500 or NV-A960 Editing Controller (options).

Rear



① **Fan Motor**

② **Auto Back Space Selector**
At "ON", spliced recording with out blank on the picture can be done in REC PAUSE mode.

③ **Controller Select**
When using an optional editing controller or remote controller, set this selector to a position corresponding to the controller used.

④ **Time Code Input Jack**
Connect this terminal to the output terminal of a time code generator when you wish to record time code signals. Set the Audio CH2 Selector ⑦ to "TIME CODE".

⑤ **Video Mode Selector**
Used to avoid mistaken operation with the colour/black & white automatic selector circuit.

B/W:	The unit is forcibly set to black & white mode.
AUTO:	Distinguishes automatically between Black & White and Colour video input signals or playback video signals. However, depending on the signal, select either "B/W" or "COLOUR" if the automatic selector circuit does not operate properly.
COLOUR:	The unit is forcibly set to colour mode.

⑥ **Video Input Connector**
Connect the video signal to be recorded, such as a video camera, to this terminal.

⑦ **Audio CH2 Selector**
When recording or playing back a time code signal, set this switch to the "TIME CODE" side. When the selector is set to this side, you cannot use CH2.

⑧ **Sync Input Connector**
- Connect this connector to a composite sync signal from a reference sync signal generator when synchronizing the unit with an external reference sync signal.
- To connect advance sync from TBC.

⑨ **Video Output Connector**
Connect this to a TV Monitor, video recorder, or time base corrector.

⑩ **Edit Automatic Stop Selector**
By putting this selector in the "ON" position, the VTR will automatically stop in the event that a servo disturbance occurs during editing.

⑪ **DOC Output Connector**
When it is connected, a dropout detection RF signal will be output. Connect this to the DOC Input terminal of a time base corrector.

⑫ **Time Code Output Jack**
Connect this jack to the input jack of a time code reader and play back time code signals.
Set the Audio CH2 Selector ⑦ to "TIME CODE".

⑬ **Audio Monitor Output Jack**
You can obtain the audio output selected by Audio Monitor Selector ㊷ from this terminal.

⑭ **Capstan Override Jack**
Use this jack when connecting with the Editing Controller AG-A800.
Connect this jack to the CAP OVERRIDE Jack of the AG-A800 when synchronizing the capstan with the recorder (or player) during editing.

⑮ **Remote Control Connector**
When you wish to operate the unit from a remote location, connect the optional Remote Search Controller NV-A505 to this Connector. Alternatively, when you wish to perform editing, connect an optional Editing Controller (AG-A750, AG-A650, NV-A500 or NV-A960).

⑯ **Dubbing Input Connector**
Using the optional 7P dubbing cable (AG-C65), connect this to the Dubbing Output Connector of the source (playback). Note that you cannot connect this to the dubbing connector of a 3/4" VTR.

⑰ **S-VIDEO Input Connector**
This is a 4P input connector of separated brightness signal and colour signal.

⑱ **Normal Audio Input Level Selector**
This selector can be set to −6 dBs, 0 dBs and +4 dBs in line with the level of the signals supplied to the Audio Input (CH1/CH2) Jacks.

⑲ **Audio Input (CH1/CH2) Jacks**
These input jacks accept signals from external audio equipment such as a tape recorder, record player, etc.

⑳ **HD Audio Input Level Selector**
This selector can be set to −6 dBs, 0 dBs and +4 dBs in line with the level of the signals supplied to the HD Sound Input (CH1/CH2) Jacks.

㉑ **HD Sound Input (CH1/CH2) Jacks**
These input jacks are intended exclusively for recording HD Sound.

㉒ **Audio Output (CH1/CH2) Jacks**
Connect these jacks to audio (stereo, etc.) equipment using audio cable. You can select either Normal Audio or HD Sound using the Audio Output Selector (53) on the front panel.

㉓ **Audio Output Level Selector**
This is the selector for audio output level (−6 dBs, 0 dBs or +4 dBs).

㉔ **HD Sound Output (CH1/CH2) Jacks**
This is the selector for audio output level (−6 dBs, 0 dBs or +4 dBs).

㉕ **Dubbing Output Connector**
Connect this to the Dubbing Input Connector of an editor using the optional 7P dubbing cable (AG-C65). You cannot connect this to the dubbing connector of a 3/4" VTR.

㉖ **S-VIDEO Output Connector**
This is a 4P output connector of separated brightness signal and colour signal.

㉗ **Ground Terminal**
If hum occurs, connect this terminal to the ground terminal of equipment connected to the unit.

㉘ **VOLTAGE Select Switch**
When using this unit, make sure that the available voltage is selected correctly, before connecting the power cord to an AC outlet.

㉙ **Power Cord**

1. GENERAL INTRODUCTION

The Panasonic S–VHS Model AG–7500 VTR is based on a proven VHS chassis mechanism which provides magnificent picture and audio quality, with less deterioration while editing or dubbing as compared to the normal VHS system.
The new features of the AG–7500 are listed in this description.
The AG–7500 is fundamentally the same as the AG–6500, so please refer to the AG–6500 Service Manual (ORDER NO. VRD8701202) regarding the basic circuits.

	ITEM	AG7500	AG6500
MECHANISM	S-VHS TAPE DETECTION SW	YES	NO
SERVO	FRAMING (2F)	YES	YES
	COLOUR FRAMING (4F)	YES	YES
	AUTO H PHASE	YES	YES
	CAPSTAN OVERRIDE	YES	NO
VIDEO	S-VHS	YES	NO
	DIGITAL COMB FILTER	YES	NO
	S-VIDEO IN/OUT	YES	NO
AUDIO	IN/OUT	XLR	PHONO
OTHERS	AUTO BACK SPACE SW		
	IMAGE SW (OFF-DETAIL-EDIT)		
	S-VHS SW		
	NOTCH SW		
	AUDIO MIX REC SW		

Figure 1–1 Comparison Chart

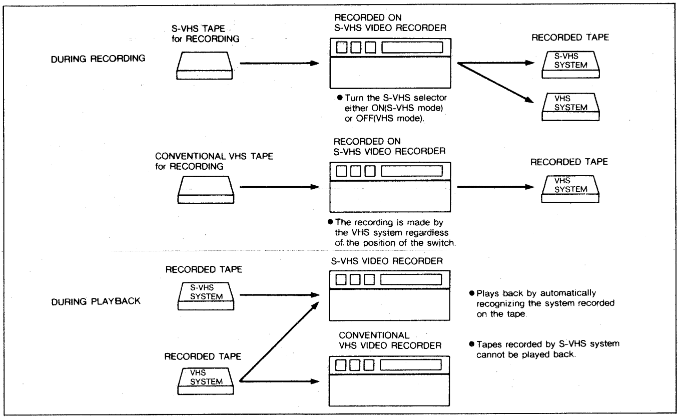

DURING RECORDING
S-VHS TAPE for RECORDING
RECORDED ON S-VHS VIDEO RECORDER
● Turn the S-VHS selector either ON(S-VHS mode) or OFF(VHS mode).
RECORDED TAPE
S-VHS SYSTEM
VHS SYSTEM
CONVENTIONAL VHS TAPE for RECORDING
RECORDED ON S-VHS VIDEO RECORDER
● The recording is made by the VHS system regardless of the position of the switch.
RECORDED TAPE
VHS SYSTEM
DURING PLAYBACK
RECORDED TAPE
S-VHS SYSTEM
S-VHS VIDEO RECORDER
● Plays back by automatically recognizing the system recorded on the tape.
RECORDED TAPE
VHS SYSTEM
CONVENTIONAL VHS VIDEO RECORDER
● Tapes recorded by S-VHS system cannot be played back.

Figure 1–2 Interchangeability of Video Recorders and Cassettes

1-1. S-VHS System

The S-VHS System has been designed to meet the critical demands of the Video Information Age.
This system incorporates technologies that provide high resolution and excellent picture quality with the VHS Video system, which is solidly established to the world over for industrial and home use.
The combination of this system with the newly developed S-VHS video cassette has enabled epoch-making progress in picture clarity and detail.
The system produces a horizontal resolution of no less than 400 lines.

	S-VHS	VHS
Y FM CARRIER (MHz)	5.4 (SYNC TIP) ∫ 7 (PEAK WHITE)	3.8~4.8
RESOLUTION (LINE)	400	250
WHITE CLIP (%)	210	190
DARK CLIP (%)	70	55
OTHERS	1) S-VHS TAPE 2) SUB EMPHASIS CIRCUIT, (+SUB DEEMPHASIS) 3) PILOT BURST SIGNAL ON RECORDED CHROMA SIGNAL	1) S-VHS or VHS TAPE 2) DETAIL ENHANCER (NO DEEMPHASIS) NOISE CANCEL

Figure 1-3 S-VHS & VHS

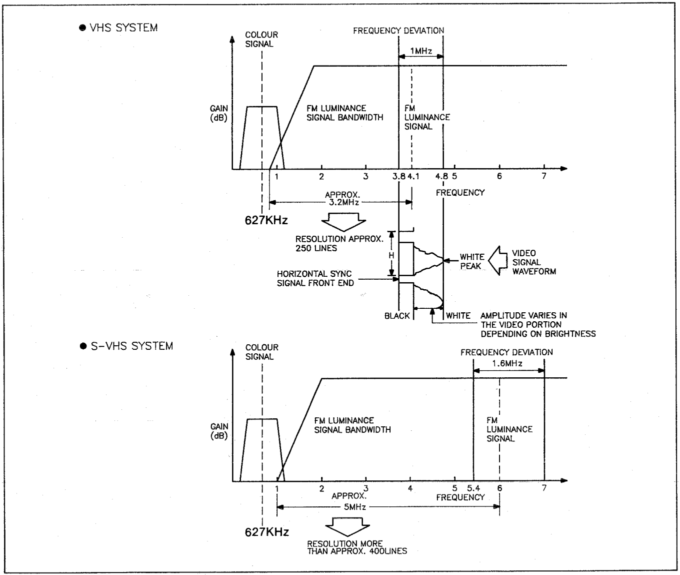

● VHS SYSTEM
COLOUR SIGNAL
FREQUENCY DEVIATION
1MHz
GAIN (dB)
FM LUMINANCE SIGNAL BANDWIDTH
FM LUMINANCE SIGNAL
1
2
3
3.8
4.1
4.8
5
6
7
FREQUENCY
APPROX. 3.2MHz
627KHz
RESOLUTION APPROX. 250 LINES
H
HORIZONTAL SYNC SIGNAL FRONT END
WHITE PEAK
VIDEO SIGNAL WAVEFORM
BLACK
WHITE
AMPLITUDE VARIES IN THE VIDEO PORTION DEPENDING ON BRIGHTNESS
● S-VHS SYSTEM
COLOUR SIGNAL
FREQUENCY DEVIATION
1.6MHz
GAIN (dB)
FM LUMINANCE SIGNAL BANDWIDTH
FM LUMINANCE SIGNAL
1
2
3
4
5
5.4
6
7
APPROX. 5MHz
FREQUENCY
627KHz
RESOLUTION MORE THAN APPROX. 400LINES

Figure 1-4 Frequency Allocation

1-2. S-VHS Cassette Tape

The newly developed tape for S-VHS equipment employs an ultra-high-density charge magnetic layer with superior surface smoothness. Super-fine cobalt-coated ferric oxide particles of extremely high coercivity are used together with a binder material that assures uniform dispersion of the magnetic coating.

The S-VHS Cassette Tape has an ID hole and it is used to recognize the cassette tape whether S-VHS or not as shown in Figure 1-7.

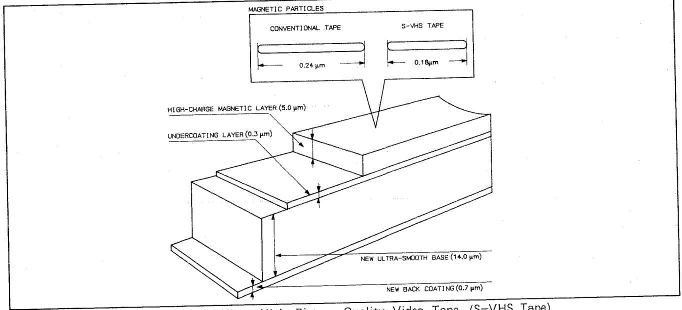
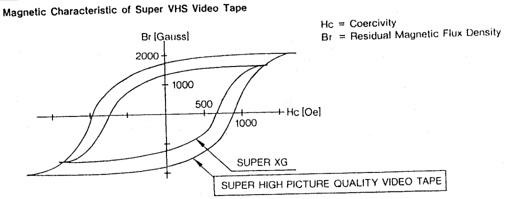

MAGNETIC PARTICLES
CONVENTIONAL TAPE
S-VHS TAPE
0.24 µm
0.18µm
HIGH-CHARGE MAGNETIC LAYER (5.0 µm)
UNDERCOATING LAYER (0.3 µm)
NEW ULTRA-SMOOTH BASE (14.0 µm)
NEW BACK COATING (0.7 µm)

Figure 1-5 Ultra High Picture Quality Video Tape (S-VHS Tape)



Magnetic tape coating of cobalt-coated ferric oxide particles

Objective
- Increase in output in the high video frequency range
- Noise reduction

Method
- Ultra-fine particles
- Optimum coercivity

Result
- Magnetic energy 80% increase
- Coercivity: 1.35 times higher
- Remanence: 1.35 times higher

Figure 1-6 Advancement of S-VHS Tape in comparison with conventional Tape

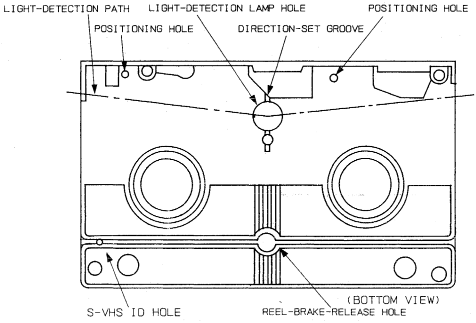

LIGHT-DETECTION PATH
LIGHT-DETECTION LAMP HOLE
POSITIONING HOLE
POSITIONING HOLE
DIRECTION-SET GROOVE
(BOTTOM VIEW)
S-VHS ID HOLE
REEL-BRAKE-RELEASE HOLE

Figure 1-7 Construction of S-VHS Cassette Tape

1-3. Amorphous Video Head System

This S-VHS VTR uses the amorphous laminated video head which achieves extremely high resolution reducing friction with the tape.
The differences between amorphous head and conventional head are shown in Figure 1-8.

The newly developed high performance video head with amorphous alloy laminated films shows better reproduction efficiency than that of a ferrite head especially in the high frequency range. Because the lamination structure decreases the eddy current.
As a result, the amorphous video head has been utilized for this purpose which the performance of head in the high frequency range is good enough to satisfy picture qualities of S-VHS VTR system.

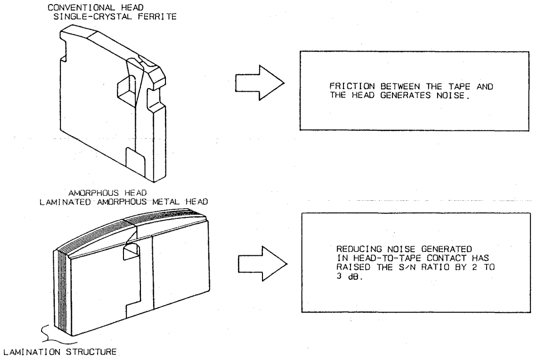

CONVENTIONAL HEAD
SINGLE-CRYSTAL FERRITE
FRICTION BETWEEN THE TAPE AND THE HEAD GENERATES NOISE.
AMORPHOUS HEAD
LAMINATED AMORPHOUS METAL HEAD
REDUCING NOISE GENERATED IN HEAD-TO-TAPE CONTACT HAS RAISED THE S/N RATIO BY 2 TO 3 dB.
LAMINATION STRUCTURE

Figure 1-8 Amorphous Video Head

1–4. Auto off Mode

If one of the following defects or abnormal conditions occur, it will be indicated by the letters "E1,E2" etc. on the tape counter display or the auto off LED. If one of the following indications appear, check the related section.

AUTO OFF LED	INDICATION	DEFECT	RELATED C.B.A. OR PARTS	FINAL CONDITION
LIGHTS	———	DEW (CONDENSATION)	DEW SENSOR SYSTEM CONTROL	EJECT MODE, CYLINDER ROTATING
LIGHTS OR FLASHES (3sec interval)	———	DRIVE CKT DEFECT OR FAN MOTOR DEFECT	FAN MOTOR POWER INTERFACE	EJECT MODE, CYLINDER ROTATING
FLASHES (1sec interval)	E1	TAPE BEG/END DETECTION LED OPEN	SYSTEM CONTROL, MECHANICAL SECTION	EJECT MODE
	E2	FRONT LOADING MOTOR LOCK (6sec)	SYSTEM CONTROL, FRONT LOADING MECHANICAL SECTION	FRONT LOADING MOTOR STOPS
	E3	LOADING MOTOR LOCK (6sec)	SYSTEM CONTROL, MECHANICAL SECTION	LOADING MOTOR STOPS
	E4	CYLINDER MOTOR LOCK (6sec)	CYLINDER MOTOR, SERVO C.B.A.	EJECT MODE
	E5	REEL MOTORLOCK (2~6sec)	REEL SERVO C.B.A. CAPSTAN LOCK (SERVO C.B.A.)	REMAINS IN THE CONDITION
	E6	ABNORMAL TAPE TENSION (3sec)	REEL SERVO C.B.A., MECHANICAL SECTION	REMAINS IN THE CONDITION

Figure 1–9 Auto Off Indication

1–5. Still/Pause Auto Release

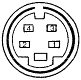
If the still or pause mode continues for more than 5 to 8 minutes without interruption, the unit will be placed in the normal playback, tape loose or X1/25 playback mode.
This protects both the tape and upper cylinder.

STILL/PAUSE	RELEASE TIMING	MODE	STILL/PAUSE	RELEASE TIMING	MODE
REC·PAUSE BY PAUSE/STILL KEY ON VTR	5 MINUTES	TAPE LOOSE AND CYLINDER STOP	REC·PAUSE BY PAUSE/STILL KEY ON AG-A650	8 MINUTES	TAPE LOOSE AND CYLINDER STOP
STILL BY PAUSE/STILL KEY ON VTR	5 MINUTES	TAPE LOOSE AND CYLINDER STOP	STILL BY PAUSE/STILL KEY ON AG-A650	8 MINUTES	×1/25 PLAY
STILL BY SEARCH DIAL ON VTR	5 MINUTES	×1/25 PLAY	STILL BY SEARCH DIAL ON AG-A650	8 MINUTES	×1/25 PLAY
REC·PAUSE BY PAUSE/STILL KEY ON AG-A750	5 MINUTES	TAPE LOOSE AND CYLINDER STOP	REC·PAUSE BY PAUSE/STILL KEY ON NV-A500	5 MINUTES	×1/25 PLAY
STILL BY PAUSE/STILL KEY ON AG-A750	5 MINUTES	×1/25 PLAY	STILL BY PAUSE/STILL KEY ON NV-A500	5 MINUTES	×1/25 PLAY
STILL BY SEARCH DIAL ON AG-A750	5 MINUTES	×1/25 PLAY	STILL BY SEARCH DIAL ON NV-A500	5 MINUTES	×1/25 PLAY

Figure 1–10 Still/Pause Auto Release

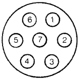
1-6. Connector Pin Assignment

The AG-7500 has S-VIDEO (4P), Dubbing (7P), Remote Control (34P) connectors. These pin assignments are listed in figure 1-11.



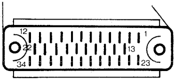
S-VIDEO IN/OUT (female)

No.	CONTENTS
1	Y GND
2	C GND
3	Y Signal Input/Output
4	C Signal Input/Output



DUB OUT (female)

No.	CONTENTS
1	Dubbing Y (Luminance) Output
2	GND
3	Head Switching Pulse Output
4	GND
5	Dubbing C (Chrominance)
6	GND
7	DUB 0V (L when connected) with CF Pulse



34 PIN

PIN No.	CONTENTS	PIN No.	CONTENTS
1	REC SWITCH	18	CONTROL PULSE OUT
2	PLAY SWITCH	19	REMOTE 19
3	FF SWITCH	20	START MARK
4	REW SWITCH	21	EJECT SWITCH
5	STOP SWITCH	22	INSERT CH1
6		23	REC HOLD
7	PAUSE SWITCH	24	PLAY HOLD
8	CASSETTE IN	25	FF HOLD
9	CUT IN SWITCH	26	REW HOLD
10	NOT SOURCE PLAY	27	INSERT CH2
11	SERVO LOCK	28	
12	GND	29	PAUSE HOLD
13	FRAME ADV. SWITCH	30	REMOTE 30
14	REVERSE COUNT	31	CUT IN HOLD
15	CUT OUT SWITCH	32	INSERT VIDEO
16	EDIT SWITCH	33	REMOTE 33
17	REVERSE	34	+12V

Figure 1-11 Connector Pin Assignment

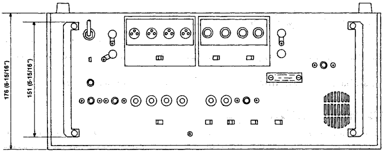
1-7. Internal Jumper

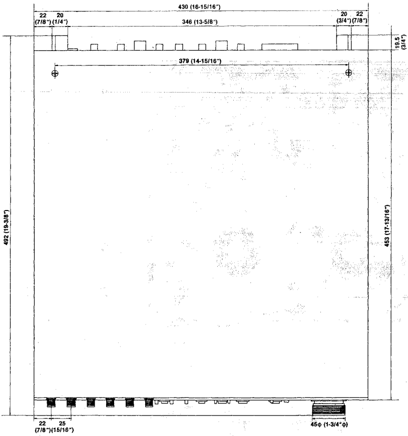
The AG-7500 also has some internal jumpers, which are summerized below.

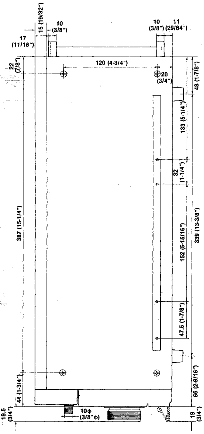
P.C.B.	JUMPER	FUNCTION	FACTORY STANDARD & OPERATION
KEY BOARD	J6901	DIRECT SEARCH	OPEN : WHEN THE SEARCH DIAL IS ROTATED (EXCEPT EJECT MODE) THE DECK GOES TO SEARCH MODE.
	J6902	SHORT FF	CONNECT : THE UNIT WILL WIND THE TAPE SLIGHTLY, WHEN THE TAPE BEGINNING IS DETECTED.
	J6903	AUTO REW	CONNECT : THE UNIT WILL REWIND THE TAPE TO THE BEGINNING WHEN THE TAPE END IS DETECTED.
REEL SERVO	TP2704 TP2703	AUTO OFF INHIBIT	OPEN : IF CONNECTED, ALL THE AUTO OFF MODES ARE INHIBITED AND THE UNIT STAYS IN THE ABNORMAL CONDITION.

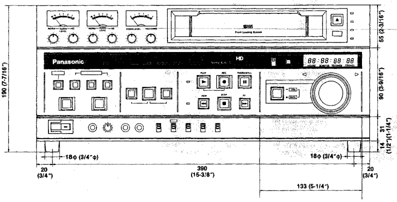
Figure 1-12 Internal Jumpers

DIMENSIONS


176 (6-15/16")
151 (5-15/16")


430 (16-15/16")
22 (7/8")
20 (1/4")
346 (13-5/8")
20 (3/4")
22 (7/8")
19.5 (3/4")
379 (14-15/16")
492 (19-3/8")
453 (17-13/16")
22 (7/8")
25 (15/16")
45φ (1-3/4"φ)


15 (19/32")
10 (3/8")
17 (11/16")
10 (3/8")
11 (29/64")
22 (7/8")
120 (4-3/4")
20 (3/4")
48 (1-7/8")
133 (5-1/4")
32 (1-1/4")
387 (15-1/4")
339 (13-3/8")
152 (5-15/16")
47.5 (1-7/8")
44 (1-3/4")
66 (2-9/16")
19.5 (3/4")
10φ (3/8"φ)
19 (3/4")


Front Loading System
Panasonic
HD
PLAY
REC
PAUSE/STILL
REW
STOP
FF
88:88:88 88
HOURS MINUTES SECONDS FRAMES
55 (2-3/16")
190 (7-7/16")
90 (3-9/16")
31 (1-1/4")
14 (1/2")
18φ (3/4"φ)
18φ (3/4"φ)
20 (3/4")
390 (15-3/8")
20 (3/4")
133 (5-1/4")

Unit: mm
(inch)

REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout it's useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

REGULAR MAINTENANCE IS NECESSARY

The VCR is a complicated piece of equipment. It contains many belts, rollers, heads etc., which become worn, and deteriorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

REGULAR MAINTENANCE IS RECOMMENDED

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after-sale repairs.

MAINTENANCE PARTS LOCATION

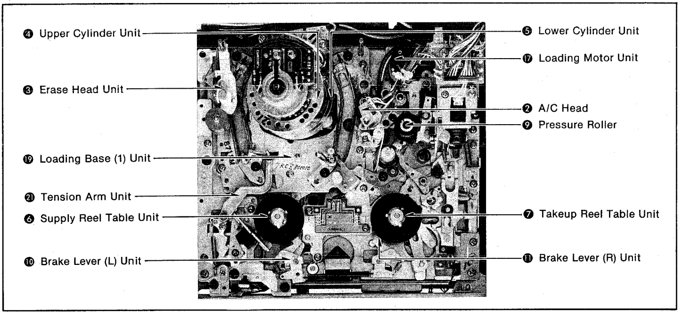

④ Upper Cylinder Unit
⑤ Lower Cylinder Unit
⑰ Loading Motor Unit
③ Erase Head Unit
② A/C Head
⑨ Pressure Roller
⑲ Loading Base (1) Unit
㉑ Tension Arm Unit
⑥ Supply Reel Table Unit
⑦ Takeup Reel Table Unit
⑩ Brake Lever (L) Unit
⑪ Brake Lever (R) Unit

Figure 1 Top View

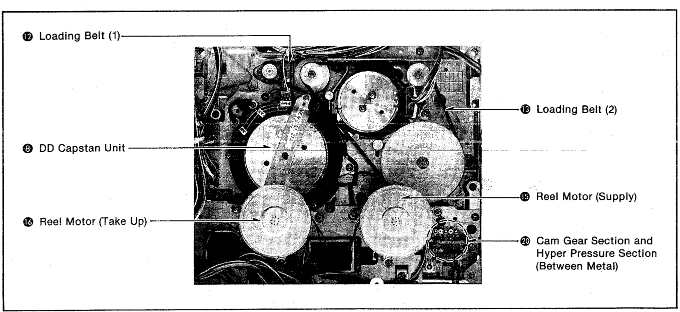

⑫ Loading Belt (1)
⑬ Loading Belt (2)
⑧ DD Capstan Unit
⑮ Reel Motor (Supply)
⑯ Reel Motor (Take Up)
⑳ Cam Gear Section and Hyper Pressure Section (Between Metal)

Figure 2 Bottom View

MAINTENANCE CHART

The following periodic maintenance is required to prolong the life of the machine.
Since the parts are keyed to the Inner Parts Location Diagram, when you replace the following parts, refer to the diagram.

	Part Name	Unit or Part No.	Hour										
			500	1000	1500	2000	2500	3000	3500	4000	4500	5000	Page
❶	Tape Transporters	———	●	●	●	●	●	●	●	●	●	●	2-11, 2-12, 2-13
❷	A/C Head	VBR0147	●	●	●	●	●	●	●	◎	●	●	2-13, 2-14, 2-15
❸	Erase Head Unit	VXL1003	●	●	●	●	●	●	●	◎	●	●	———
❹	Upper Cylinder Unit	VEH0414	●	◎	●	◎	●	◎	●	◎	●	◎	2-9
❺	Lower Cylinder Unit	VEG0666	●	●	●	●	●	●	●	●	●	◎	2-9
❻	Supply Reel Table Unit	VXR0113		●		●		●		●		●	2-19
❼	Takeup Reel Table Unit	VXR0113		●		●		●		●		●	2-19
❽	DD Capstan Unit	VEM0164	●	●	●	●	●	●	●	●	●	◎	———
❾	Pressure Roller	VXG0013S	●	●	◎	●	●	◎	●	●	◎	●	———
❿	Brake Lever (L) Unit	VXZ0148				◎				◎			2-17, 2-18
⓫	Brake Lever (R) Unit	VXZ0149				◎				◎			2-17, 2-18
⓬	Loading Belt (1)	VDV0122				◎				◎			———
⓭	Loading Belt (2)	VDV0135				◎				◎			———
⓮	Elevator Motor Belt	VDV0144				◎				◎			———
⓯	Reel Motor (Supply)	KFN56DB3AS				◎				◎			———
⓰	Reel Motor (Take Up)	KFN56DB3AT				◎				◎			———
⓱	Loading Motor Unit	VEM0135								◎			———
⓲	Hour Meter	VSE0036				◎				◎			———
⓳	Loading Base Unit	VXA1334		■		■		■		■		■	———
⓴	Cam Gear Section and Hyper Pressure Section (Between Metal)	———		■		■		■		■		■	———
㉑	Tension Arm Unit	VXL1073										◎	2-16, 2-17

＊NOTE:

Symbol	Maintenance	Requirement	Remark
●	Cleaning	Freon TF, Ethyl-alcohol or Cleaning Liquid (Purchase locally)	Wipe dirt from the parts using soft cloth impregnated with Freon TF or Ethyl-Alcohol. Note: When cleaning rubber parts, avoid using excessive alcohol since it may accelerate deterioration of these parts. After cleaning with alcohol, wipe the alcohol quickly and thoroughly.
◎	Replacement	———	———
■	Greasing	Molytone Grease (MOR265)	Wipe the old grease and apply new grease.

DISASSEMBLY PROCEDURES

1. DISASSEMBLY FLOW CHART

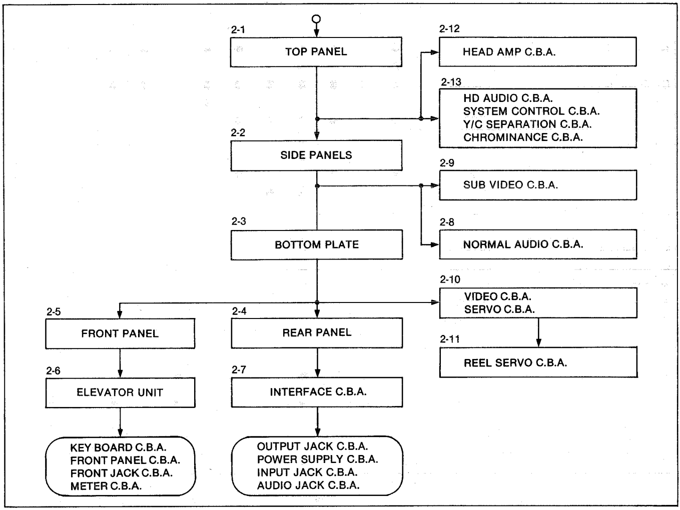

2-1
TOP PANEL
2-12
HEAD AMP C.B.A.
2-13
HD AUDIO C.B.A.
SYSTEM CONTROL C.B.A.
Y/C SEPARATION C.B.A.
CHROMINANCE C.B.A.
2-2
SIDE PANELS
2-9
SUB VIDEO C.B.A.
2-3
BOTTOM PLATE
2-8
NORMAL AUDIO C.B.A.
2-10
VIDEO C.B.A.
SERVO C.B.A.
2-5
FRONT PANEL
2-4
REAR PANEL
2-11
REEL SERVO C.B.A.
2-6
ELEVATOR UNIT
2-7
INTERFACE C.B.A.
KEY BOARD C.B.A.
FRONT PANEL C.B.A.
FRONT JACK C.B.A.
METER C.B.A.
OUTPUT JACK C.B.A.
POWER SUPPLY C.B.A.
INPUT JACK C.B.A.
AUDIO JACK C.B.A.

Figure D1

The above flow chart describes the order of steps for removing the cabinet parts and certain printed circuit boards in order to gain access to the items needing servicing. To reassemble the unit, follow the steps in reverse order.

2. DETAILED DISASSEMBLY METHOD

2–1. Removal of the Top Panel

1. Unscrew the 2 screws (A) on the Top Panel (Figure D2).
2. Carefully lift the rear of the case and slide it off the back of the unit.

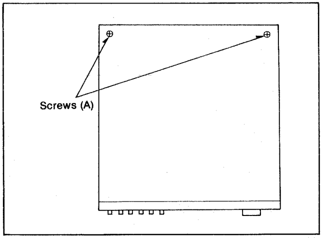


Figure D2

2–2. Removal of the Side Panels

1. Unscrew the 8 screws (B) on the Side Panels (Figure D3).
2. Lift off the Side Panels.

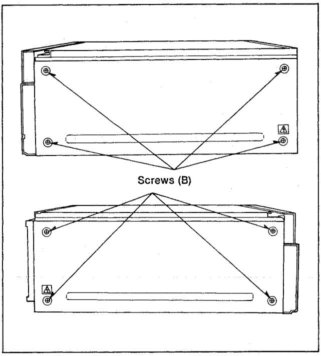


Figure D3

2–3. Removal of the Bottom Plate

1. Unscrew the 9 screws (C).
2. Lift off the Bottom Plate.

Note:
Do not remove the 4 rubber feet.

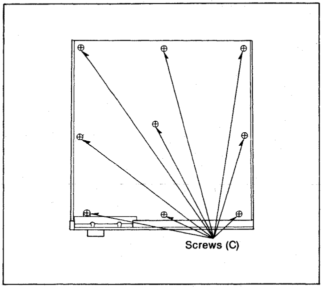


Figure D4

2–4. Removal of the Rear Panel

1. Unscrew the 6 screws (D) on the rear panel (Figure D5).
2. Lift the Rear Panel and carefully pull the panel off the unit.

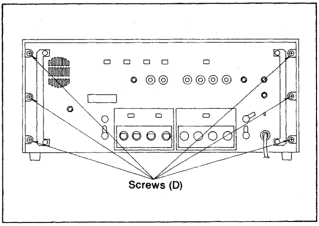


Figure D5

2–5. Removal of the Front Panel

1. Unscrew the 4 screws (E) on the side angles and the 2 screws (F) on the bottom of the Front Panel (Figure D6 and Figure D7).
2. Lift the Front Panel and carefully pull the panel off from the unit as shown in Figure D8.

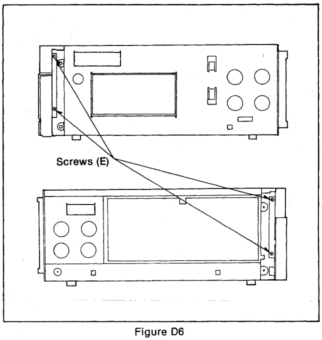


Figure D6

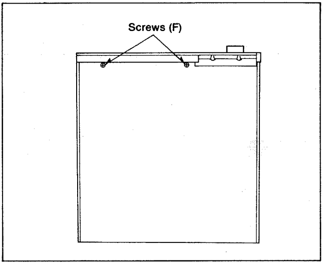


Figure D7

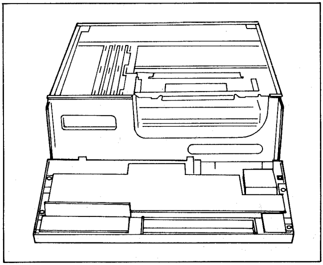


Figure D8

2–6. Removal of the Elevator Unit

1. Unscrew the 4 screws (G) on the Elevator Unit (Figure D9).
2. Carefully lift the Elevator Unit out.

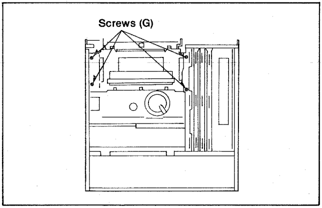


Figure D9

2–7. Opening of the Interface C.B.A.

1. Unlock the 2 lock pins (H) (Figure D10) and open up the Interface C.B.A. as shown in Figure D11.

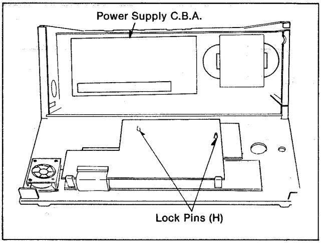

Power Supply C.B.A.
Lock Pins (H)

Figure D10

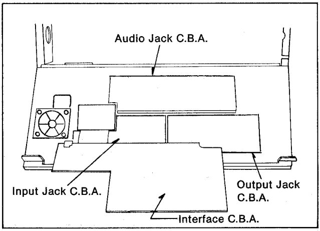

Audio Jack C.B.A.
Input Jack C.B.A.
Output Jack C.B.A.
Interface C.B.A.

Figure D11

2–8. Opening of the Normal Audio C.B.A.

1. Unscrew the 3 screws (I) on the Normal Audio C.B.A. (Figure D12) and open up the Normal Audio C.B.A. as shown in Figure D13.

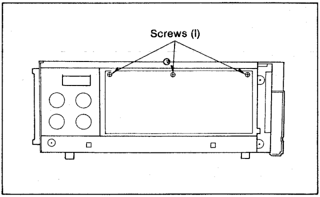


Figure D12

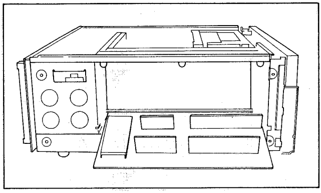


Figure D13

2–9. Removing of the Sub Video C.B.A.

1. Unscrew the 4 screws (J) on the Sub Video C.B.A. (Figure D14) and carefully pull out the Sub Video C.B.A. from the unit.

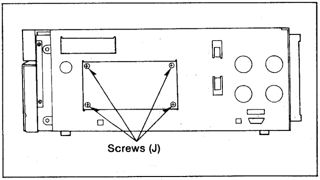


Figure D14

2–10. Opening of the Servo C.B.A., Video C.B.A. and Reel Servo C.B.A.

1. Unscrew the 5 screws (K) on the Servo & Video C.B.As. (Figure D15).
2. Open up the Servo & Video C.B.As. as shown in Figure D16.

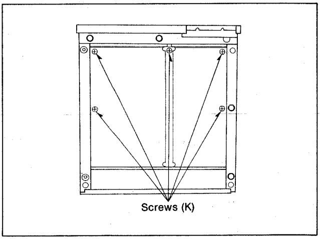


Figure D15

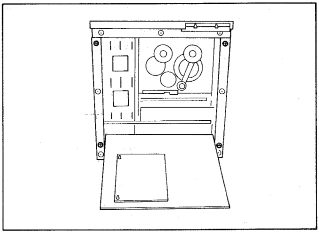


Figure D16

2–11. Opening of the Reel Servo C.B.A.

1. After opening of the Servo & Video C.B.As., unlock the 2 lock Pins (L) (Figure D17).
2. Open up the Reel Servo C.B.A. as shown in Figure D18.

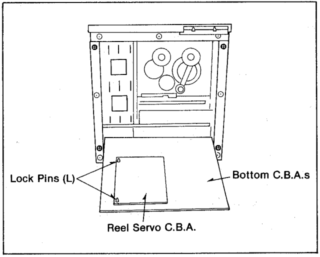

Lock Pins (L)
Bottom C.B.A.s
Reel Servo C.B.A.

Figure D17

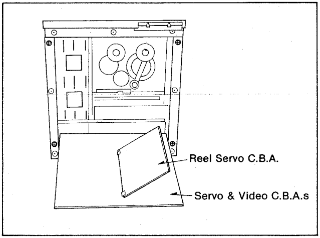

Reel Servo C.B.A.
Servo & Video C.B.A.s

Figure D18

2–12. Removal of the Head Amp C.B.A.

1. Unscrew the 2 screws (M) (Figure D19).
2. Lift the Head Amp C.B.A. carefully.

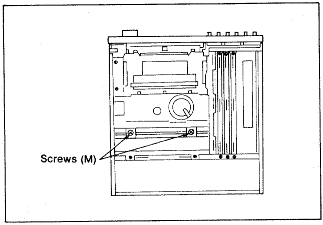


Figure D19

2–13. Removal of the HD Audio C.B.A., System Control C.B.A., Comb Filter C.B.A. and Chrominance C.B.A.

A. HD Audio C.B.A.
   1. Unscrew the 2 screws (N) (Figure D20).
   2. Lift the C.B.A. out from the unit.
   3. Stand the C.B.A. using the C.B.A. standing holes (O) as shown in Figure D21 and Figure D22.

B. System Control C.B.A.
   1. Unscrew the 2 screws (P) (Figure D20).
   2. Lift the C.B.A. out from the unit.
   3. Stand the C.B.A. using the C.B.A. standing holes (Q) as shown in Figure D21 and Figure D22.

C. Y/C Separation C.B.A.
   1. Unscrew the 2 screws (R) (Figure D20).
   2. Lift the C.B.A. out from the unit.
   3. Stand the C.B.A. using the C.B.A. standing holes (S) as shown in Figure D21 and Figure D22.

D. Chrominance C.B.A.
   1. Unscrew the 2 screws (T) (Figure D20).
   2. Lift the C.B.A. out from the unit.
   3. Stand the C.B.A. using the C.B.A. standing holes (U).

Note:
To prevent the C.B.A. damage or shock hazard, please pay attention when the C.B.A. is stood as shown in Figure D22.

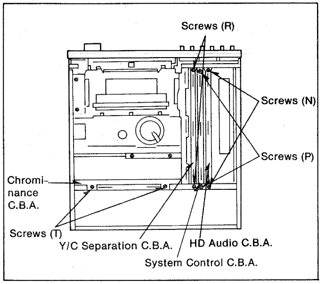

Screws (R)
Screws (N)
Screws (P)
Chromi-nance C.B.A.
Screws (T)
Y/C Separation C.B.A.
HD Audio C.B.A.
System Control C.B.A.

Figure D20

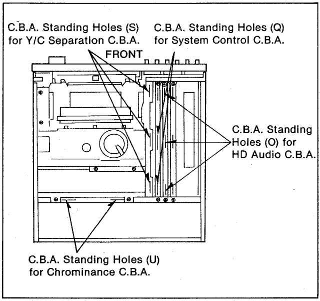

C.B.A. Standing Holes (S) for Y/C Separation C.B.A.
C.B.A. Standing Holes (Q) for System Control C.B.A.
FRONT
C.B.A. Standing Holes (O) for HD Audio C.B.A.
C.B.A. Standing Holes (U) for Chrominance C.B.A.

Figure D21

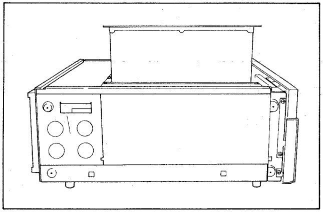
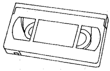
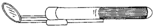
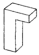
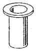
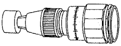
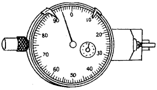
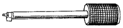
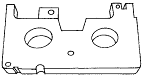
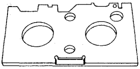
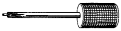
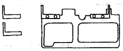
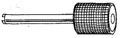
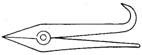
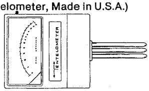
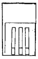
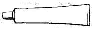
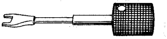
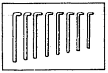
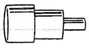


Figure D22

MECHANICAL ADJUSTMENT PROCEDURES

The regular maintenance is important to maintain the inital specification of the deck and to prevent tape damage. The specified servicing fixture must be used to conduct adjustment requiring a servicing fixture.
The following fixtures, tools and measuring equipments are required to conduct complete Mechanincal Adjustments.

1. SERVICING FIXTURES & TOOLS

VFM8180HMDH VHS Alignment Tape  Refer to Technical Information order No. VRD-TS-409-1	VFK0343 Check Light 	VFK0344 Post Height Adjustment Fixture (P_1) VFK0345 Post Height Adjustment Fixture (P_4)  VFK0344  VFK0345
VFK0133 (Dial Torque Gauge) VFK0134 (Plastic Clamper Only) VFK0180 Adaptor for VFK0133 	VFK0190 Reel Table Height Fixture 	VFK0135 Eccentric Screwdriver 
VFK0188 Cassette Holder Fixture 	VFK0191 Post Adjustment Plate 	VFK0330 Fine Adjustment Screwdriver (3mmφ) 
VFK0236 Tension Post Adj. Plate VFK0394 FWD Sensor Adj. Fixture VFK0393 REV Sensor Adj. Fixture 	VFK0329 Post Adjustment Screwdriver 	VFK0335 Retaining Ring Remover (3mm/4mm) 
VFK0132 Back Tension Meter (Tentelometer, Made in U.S.A.) 	VFK27 Head Cleaning Stick  MOR265 Morlytone Grease (Cam Gear, Slide Selection, Hyper Pressure Section etc.) 	VFK0328 H-Position Adj. Fixture 
VFK0326 Hex. Wrench (Set) (0.7, 0.9, 1.2, 1.5, 1.6, 2, 2.4, 3mm) 	Cleaning Liquid (Freon TF., Alcohol) < Purchase Locally > (Tape Transport Rubber Parts etc.)	VFK0268 Stator A. Adj. Fixture  This is to get a correct position (centre position) of stator Angle.

2. CYLINDER MAINTENANCE PROCEDURES

2-1. PROCEDURES FOR CLEANING OF THE CYLINDER UNIT

1. Position the video head to permit access for cleaning and hold the upper cylinder to keep it from turning while cleaning.
2. Gently rub the video head in direction of tape travel with Head Cleaning Stick moistened with Freon TF.
3. Repeat for the other video heads. (Figure M1)

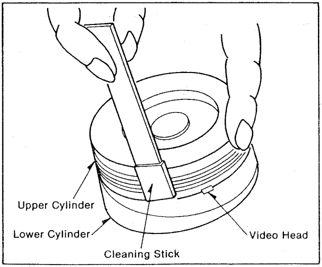


Figure M1

*Notes:
1. Do not rub vertically.
2. Do not apply any pressure to heads. If contraminant is not easily removed, continued gentle wiping will usually remove the substance.
3. Do not rotate the Upper Cylinder Unit clockwise when cleaning it.

3. TAPE INTERCHANGEABILITY ADJUSTMENT PROCEDURES

3-1. ADJUSTMENT FLOWCHART

This flow chart describes the order of steps for adjusting the tape guide posts and A/C head in order to gain access to the items needing servicing.

AFTER REINSTALLING THE P1 POST, OR IF THE P1 POST HAS BEEN TURNED EXCESSIVELY.

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

* **Note:**
Adjust the tape guide post P1 only.

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT (LINEARITY).

AFTER REINSTALLING ALL POSTS OR IF ALL POSTS HAVE BEEN TURNED EXTREMELY.

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

3-2-3. ADJUSTMENT OF THE PULL-OUT POST (P5 POST) HEIGHT.

3-2-4. CONFIRMATION OF THE A/C HEAD TILT.

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT.

AFTER REINSTALLING THE A/C HEAD.

↓

3-2-4. CONFIRMATION OF THE A/C HEAD TILT.

↓ * **Note:** Do not change the height of P4 post.

3-2-6. COARSE ADJUSTMENT OF THE A/C HEAD HEIGHT.

↓

3-2-7. ADJUSTMENT OF THE A/C HEAD HEIGHT AND AZIMUTH.

↓

3-2-8. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE).

↓

3-2-9. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE).

AFTER REINSTALLING THE P4 POST, OR IF THE P4 POST HAS BEEN TURNED EXCESSIVELY.

↓

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

↓ * **Note:** Adjust the P4 post only.

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

↓ * **Note:** Adjust the P4 post only.

3-2-4. CONFIRMATION OF THE A/C HEAD TILT.

↓

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT (LINEARITY).

AFTER REINSTALLING THE PULL-OUT POST (P5 POST).

↓

3-2-3. ADJUSTMENT OF THE PULL-OUT POST (P5 POST).

* **Note:** Do not readjust any other post.

Figure M2 Tape Interchangeability Adjustment Flow Chart

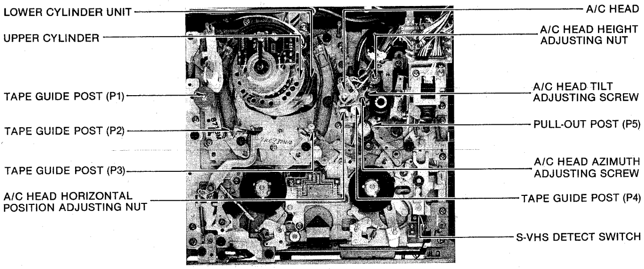

LOWER CYLINDER UNIT
UPPER CYLINDER
TAPE GUIDE POST (P1)
TAPE GUIDE POST (P2)
TAPE GUIDE POST (P3)
A/C HEAD HORIZONTAL POSITION ADJUSTING NUT
A/C HEAD
A/C HEAD HEIGHT ADJUSTING NUT
A/C HEAD TILT ADJUSTING SCREW
PULL-OUT POST (P5)
A/C HEAD AZIMUTH ADJUSTING SCREW
TAPE GUIDE POST (P4)
S-VHS DETECT SWITCH

Figure M3

3-2. ADJUSTMENT PROCEDURES

3–2–1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS (P1, P2, P3 AND P4)

* Note:

1. The Tape Guide Posts have been precisely adjusted at the factory.
   Therefore, normally do not change the height of the P1 and P4 Posts.
   The following adjustment is required only when replacing the posts.
2. If the curling is apparent proceeded to the P4 Post, wipe dirt from the Pressure Roller and Capstan Shaft using a soft cloth impregnated with Freon TF or cleaning liquid.
3. To prevent the alignment tape from being damaged, use a normal cassette tape for this procedure.

* Equipment Required:

Post Height Adjustment Fixture (P1)	VFK0344
Post Height Adjustment Fixture (P4)	VFK0345
Nut Driver (Purchase Locally)	
Check Light	VFK0343

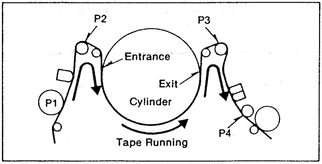

P2
P3
Entrance
Exit
Cylinder
P1
P4
Tape Running

Figure M4 Tape Transport Posts

A. Adjustment and Confirmation of the P1 Post Height

1. Remove the Top Panel and the Front Loading Unit.
2. Set the P1 Post Height Adjustment Fixture as shown in Figure M5 and M6.

* Note:
The P1 Post Height Adjustment Fixture must be set on the Polished Portion of Chassis near the P1 Post.

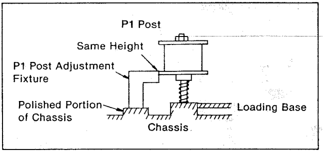

P1 Post
Same Height
P1 Post Adjustment Fixture
Polished Portion of Chassis
Loading Base
Chassis

Figure M5

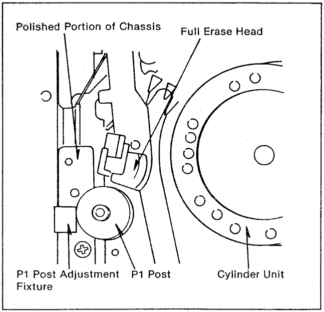

Polished Portion of Chassis
Full Erase Head
P1 Post Adjustment Fixture
P1 Post
Cylinder Unit

Figure M6

3. Confirm the lower flauge of the P1 Post is as same height as upper edge of the P1 Post Height Adjustment Fixture. (Figure M5 and M6)
4. If the height is not same, adjust the P1 Post Height by the Nut Driver.
5. Finally, play back the ending portion of NV–E180 cassette, and confirm that the lower flange of the P1 post just touches the bottom edge of the tape by using the Check Light. If there is waving or frilling at the lower or upper edge of P1 Post, readjust the Height of P1 Post correctly. (Figure M7)

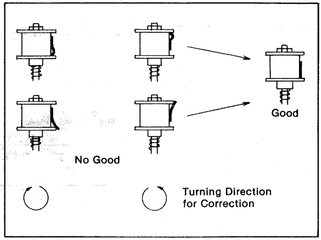

Good
No Good
Turning Direction for Correction

Figure M7

B. Adjustment and Confirm of the P4 Post Height

* Note:

1. Prevent any damage for the P4 Post, so set or remove the P4 Post Height Adjustment Fixture carefully.
2. Confirm that the P4 Post Height Adjustment Fixture is SET on the Chasses perfectly, when adjusting P4 Post Height. Do not put the wire of connector P6705 near the P4 Post between the P4 Post Height Adjustment Fixture and Chassis.

1. Set the P4 Post Height Adjustment Fixture as shown in Figure M8.

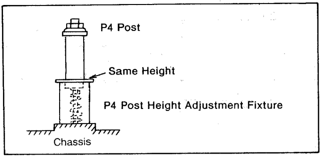


Figure M8

2. Confirm the lower edge of the P4 Post as same height as upper edge of the P4 Post Adjustment Fixture. (Figure M8)
3. If the height is not same, adjust the P4 Post height by the Nut Driver.
4. Play back the beginning portion of NV–E180 cassette, and confirm that the lower flange of the P4 post just touches the bottom edge of the tape by using the Check Light.
   If there is waving or frilling at the lower or upper edge of the tape, correct the tilt of A/C Head. After adjusting tilt of the A/C Head, the A/C Head Height Adjustment may be needed. (Figure M8)

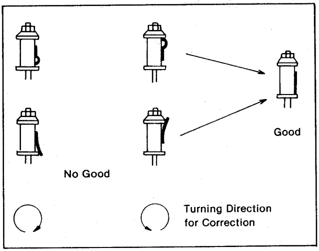


Figure M9

C. Adjustment and Confirmation of the Tape Guide Post Heights (P2, P3)

* Note:
This adjustment and confirmation should be performed after adjustment of the P1 and P4 Tape Guide Post Heights.

* Equipment Required:
Post Adjustment Screwdriver.............VFK0329
Check Light............................VFK0343

1. Remove the Top Case.
2. When repeating the Loading and Unloading, confirm tape travel by using the Check Light. If there are waving or frilling at the lower or upper edge of the P2 and P3 Posts,readjust the heights of P2 and P3 Posts correctly so that the upper flanges of P2 and P3 posts just touch the upper edge of the tape. (Figure M10)

* Note:
Use the beginning and end portions of the NV–E180 cassette.

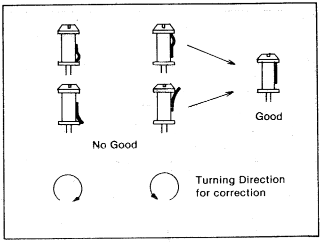


Figure M10

3. Confirm that the tape runs along the Cylinder Lead Correctly.
4. After adjusting the Tape Guide post Hights (P1, P2, P3, P4) adjustment of the Final Tape Interchangeability is required.
   (Refer to the items 3–2–3, 3–2–4, 3–2–5, 3–2–6, 3–2–7 and 3–2–8)

3–2–2. ADJUSTMENT AND CONFIRMATION OF THE P5 TAPE GUIDE POST HEIGHT

* Note:
This procedure is the last item of the Tape Interchangeability so it should be performed after adjusting other Tape Interchangeability items.

* Equipment Required:
Nut Driver (Purchase Locally)
Check Light............................VFK0343

1. Remove the Top Panel and turn the power switch on. Insert the NV–E180 cassette.
2. Play back the beginning and end portions of the cassette by REV mode.
3. Confirm that the tape runs between lower and upper edges of the P5 Post by using the Check Light. If there is waving or frilling at the lower or upper edge of the P5 Post, correct the P5 Post Height.

3–2–3. CONFIRMATION OF THE A/C HEAD TILT

* Note:
This procedure should be performed after replacing the A/C head and pressure roller, and adjusting the height of the tape guide post (P4).
(Refer to "COARSE ADJUSTMENT OF THE TAPE GUIDEPOST HEIGHTS".)

* Tools and Equipment Required:
Hex Wrench Set (0.9mm)..................VFK0326
Nut Driver (purchase locally)

1. Play back the beginning portion of NV-E180 blank cassette tape and confirm that the tape runs between lower and upper limiters of the P4 post. If there is waving or frilling in the lower edge or top edge of the tape, correct the tilt of the A/C head by turning the Hex screw located behind the A/C head. (Figure M11)

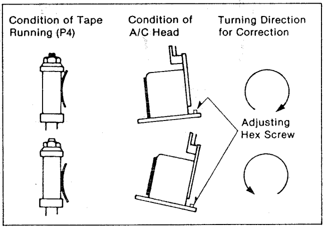

Condition of Tape Running (P4)
Condition of A/C Head
Turning Direction for Correction
Adjusting Hex Screw

Figure M11

2. If the tape curling cannot be acomplished by adjusting the A/C head tilt, then readjustment of the height of the tape guide post (P4) may be needed.

* No tes:
1. The tape guide post (P4) has been precisely adjusted at the factory. Therefore, normally the tape guide post (P4) readjustment is not required to eliminate the tape curling.
2. After adjusting the A/C head tilt, the A/C head height adjustment is required.

3-2-4. CONFIRMATION OF THE ENVELOPE OUTPUT (LINEARITY)

* Note:
Before playing back the alignment tape, play back a normal cassette tape and confirm correct transport.
(Refer to "CONFIRMATION OF THE TAPE TRANSPORT".)

* Tools and Equipment Required:
Post Adjustment Screwdriver.............VKF0329
Alignment Tape.....................VFM8180HMDH

1. Connect the scope to TP5006 on the Video Head AMP. C.B.A. and TP5005 on the same C.B.A. to Ext-Trigger the scope.
2. Play back the 2nd portion (Monoscope) of the alignment tape VFM8180HMDH.
3. Turn the Tracking Control VR and adjust for maximum RF envelope.
4. If the RF envelope appears like example "A" or "B" in Figure M12, then adjustment of the tape guide post (P2: Entrance) is necessary.
5. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the Video RF envelope waveform at the entrance portion becomes flat as shown "C" in Figure M12. (See Figure M15,too).

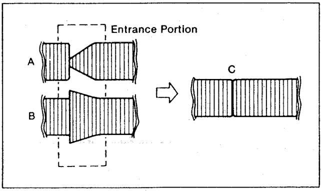


Figure M12

6. If the RF envelope appears like example "D" or "E" in Figure M10, then adjustment of the tape guide post (P3: Exit) is necessary.
7. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in "F" in Figure M13.

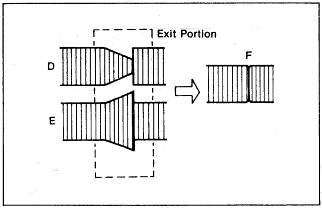


Figure M13

8. Turn the Tracking VR from end to end. The variation of RF envelope should be nearly parallel as shown in Figure M14.
9. Turn the Tracking VR and adjust for maximum RF envelope.
If the RF envelope does not meet these specs,
V1/V>0.7, V2/V>0.8,
then repeat steps 1–9 again. (Figure M16)

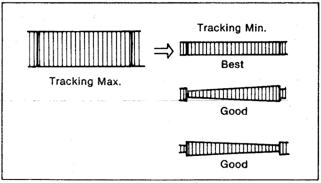


Figure M14

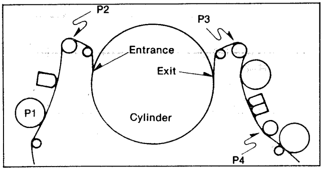


Figure M15 Loading of Posts

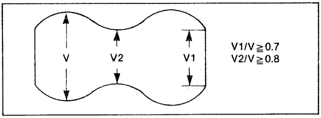


Figure M16 Spec. of Envelope Figure

10. Turn the Tracking VR from end to end again and then back to the detent (Fix) position. At the detent position, the RF envelope waveform should be at maximum. If it is not at maximum then "ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION". is necessary.

(Refer to "FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION".)

3–2–5. COARSE ADJUSTMENT OF THE A/C HEAD HEIGHT

* Note:
This procedure should be performed only when the A/C Head is replaced.

* Tools and Equipment Required:
Check Light............................VFK0343
Nut Driver (Purchase locally)

With the tape running, look at the lower edge of the control head by using the check light and check if the lower edge of tape runs along the lower edge of the control head.
If it doesn't slightly turn the nut (A) behind the A/C Head (Figure M17) to either lower or raise the A/C head so that the tape runs along the lower edge of the control head.
Turn the nut (A) clockwise to lower the head, and counterclockwise to raise it. (Figure M17)

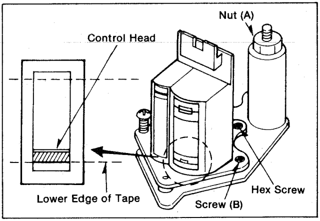


Figure M17

3–2–6. ADJUSTMENT OF THE A/C HEAD HEIGHT AND AZIMUTH

* Note:
This procedure should be performed only when the A/C Head is replaced and posts hight are readjusted.

* Tools and Equipment Required:
Nut Driver (Purchase locally)
Alignment Tape.....................VFM8180HMDH

1. Connect the scope CH1 to the HD/NOR Audio Output CH1 and the scope CH2 to the HD/NOR Audio Output CH2 on the rear panel.
2. Play back the 2nd portion (Normal Audio 6kHz) of the alignment tape, VFM8180HMDH.
3. Adjust the screw (B) so that the CH2 output level becomes maximum. (Figure M18)

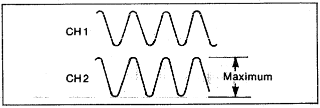


Figure M18

4. Then adjsut the nut (A) so that the CH2 envelope becomes maximum.
5. Readjust the screw (B) so that the phases of the both channel are matched as shown below. (Figure M19)

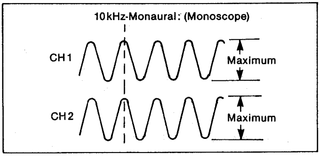


Figure M19 Adjustment of A/C Head Height and Azimuth–(3)

3–2–7. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION

* Note:
This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

* Tools and Equipment Required:
H.Position Adj. Fixture................VFK0328
Alignment Tape.....................VFM8180HMDH

1. Set the tracking Control VR to the center detent (fixed) position.
2. Connect the scope CH1 to TP5006 on the Video Head Amp. C.B.A., and CH2 to TP4001 on the NORMAL AUDIO C.B.A.
3. Play back 1st position (Monoscope and Normal Audio 3kHz) of the Alignment tape VFM8180HMDH.
4. Adjust A/C head horizontal position screw so that the phase of Audio drop out and RF envelope drop out becomes almost the same. (Figures M20 and M21)

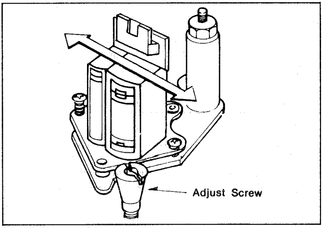


Figure M20

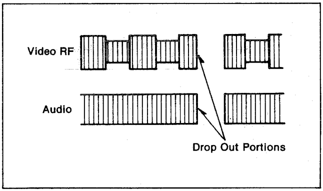


Figure M21

3–2–8. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X–VALUE)

* Note:
When the A/C head is replaced, the coarse adjustment of the A/C head horizontal position is required before performing this fine adjustment.

* Tools and Equipment Required:
H.Position Adj. Driver..................VFK0328
Alignment Tape......................VFM8180HMDH

1. Set the Tracking Control VR to the center detent (fixed) position.
2. Connect the scope CH1 to TP5006 on the Video Head Amp C.B.A., and TP5005 on the same C.B.A. to Ext–trigger the scope.
3. Play back 2nd position (Monoscope) of the Alignment tape, VFM8180HMDH.
4. Adjust the adjust screw so that the RF envelope output level becomes maximum at the detent position. (Figure M20)
5. Turn the Tracking VR from end to end and then back to the detent position.
   Confirm that the FM envelope output level is maximized at the detent position. (Figure M14)

4. OTHER ADJUSTMENT PROCEDURES

4-1. ADJUSTMENT OF THE SUB-LOADING ARM UNIT

* Equipment Required:
Eccentric Screwdriver...................VFK0135
Philips Screwdriver (purchase locally)

* Specification:
t=0.5+–0.2mm

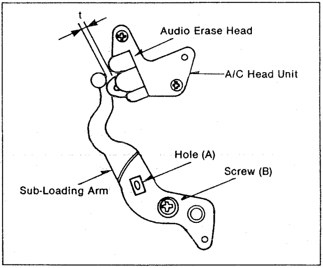


Figure M22

1. Remove the Top Cover and Cassette Compartment.
2. Insert a cassette to the removed cassette compartment. This simulates the sub–loading completion mode.
3. Turn the power switch off.
4. Loosen the screw (B), and insert the eccentric screwdriver into the adjustment hole (A). (Figure M22)
5. Adjust the position of the sub–loading threading arm unit so that the gap "t" between the Sub–Loading arm and the AE head is 0.5mm +–0.2mm. (Figure M22)

4-2. ADJUSTMENT OF THE SAFETY SWITCH

* Specification:
The switch should close when a cassette with an erase tab is inserted, and should open when a cassette without an erase tab is inserted.

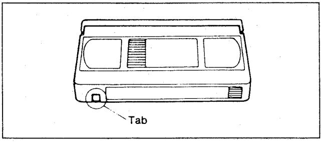


Figure M23

* Equipment Required:
Cassette Holder Fixture..................VFK0188

1. Remove the Top Cover, and Cassette Compartment.
2. Place the fixture over reel tables. Slightly loosen 3 screws (A) by about half turn. (Figure M24)
3. Turn the switch base counter clockwise and then slowly turn clockwise until the switch turn on.
4. Tighten 3 screws.

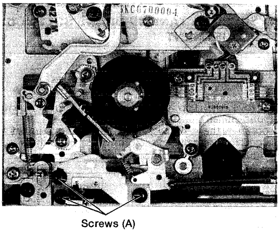


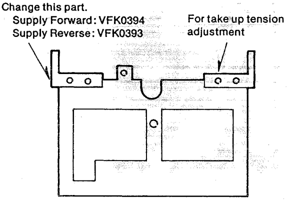
Figure M24

4-3. TENSION POSTS POSITION ADJUSTMENT

* Equipment Required:
Tension Post Adjustment Plate....................................VFK0236
FWD Sensor Adj. Fixture..................VFK0394
REV Sensor Adj. Fixture..................VFK0393
Fine Adj. Screwdriver....................VFK0330
Vacuum Tube Volt Meter (VTVM) or Digital Volt Meter

1. Remove the Top cover and the Cassette Compartment.
2. Insert a cassette to the removed cassette compartment.
3. Install the Tension Post Adjustment Plate after the sub-loading complete. Then, push the play button.

* Note:
Fix the FWD sensor adjustment fixture (VFK0394) on the tension post adjustment plate (VFK0236) when measuring the supply forward tension. Use the REV sensor adjustment fixture (VFK0393) when measuring the supply reverse tension.



This jig is Tension Post Adj. Plate (VFK0236).

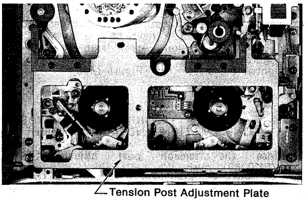


Figure M25

4-3-1. FWD TENSION POST POSITION ADJUSTMENT

1. Place the Tension Post Position Adjustment plate (VFK0236) with Forward Tension Jig (VFK0394) over the reel tables. (Figure M25) Then, push the play button. (Figure M25)
2. Connect the DVM to TP6001 on the SYSTEM CONTROL C.B.A.
3. Loosen the screw (A).
4. Insert the fine adjustment screwdriver into the adjustment hole (B) next to the screw (A) and adjust the Tension Arm Unit to 2.0V~2.5V. (Figure M26)
5. Tighten the screw (A). (Figure M26)

4-3-2. REV TENSION POST POSITION CONFIRMATION AND ADJUSTMENT

1. Place the Tension Post Position Adjustment plate (VFK0236) with the Reverse Tension Jig (VFK0393) over the reel tables. Then, push the play button.
2. Connect the DVM to TP6002 on the SYSTEM CONTROL C.B.A.

3. Loosen the screw (C). (Figure M26)

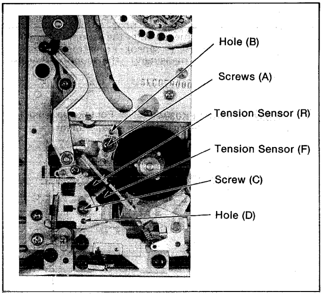

Hole (B)
Screws (A)
Tension Sensor (R)
Tension Sensor (F)
Screw (C)
Hole (D)

Figure M26

4. Insert the fine adjustment screwdriver into the adjustment hole (D) next to the screw (C) and adjust the Tension Arm Unit to 2.0~2.5V. (Figure M26)
5. Tighten the screw (C). (Figure M26)

4-3-3. TAKE-UP TENSION POST POSITION CONFIRMATION AND ADJUSTMENT

1. Place the tension post adjustment plate (VFK0236) over the reel tables. (Figure M25) Then, push the play button.
2. Connect the DVM to TP6003 on the SYSTEM CONTROL C.B.A.
3. Loosen the screw (A). (Figure M27)
4. Insert the fine adjustment scrwedriver into the adjustment hold (B) next to the screw and adjust it so that the voltmeter indicates 2~2.5V. (Figure M27)

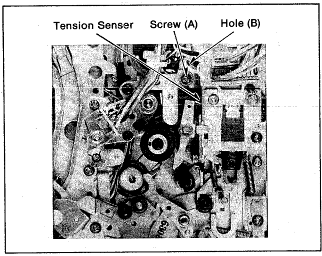

Tension Senser
Screw (A)
Hole (B)

Figure M27

5. Rotate the Tension Arm counterclockwise by hand.
   The DVM should indicate 0~0.5V.
   Next, rotate the Tension Arm clockwise. The DVM should now indicate 4.5V+-0.5V.
6. Rotate the tension arm. clockwise by hand. The DVM should indicate 0~0.5V.
   Next, rotate the Tension Arm counter-clockwise. The DVM should now indicate 4.5V +-0.5V.

4-4. SUPPLY & TAKE-UP BRAKE SOLENOID ADJUSTMENT

* Equipment Required:
Eccentric Screwdriver....................VFK0135

1. Remove the Top Case, Cassette Compartment and Front panel.
2. Loosen the 4 screws (B) and insert the eccentric screwdriver into the hole (C). (Figure M28)

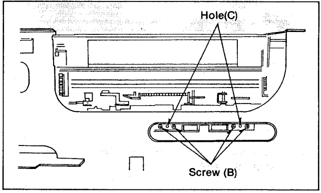

Hole(C)
Screw (B)

Figure M28

3. Adjust the position of the Brake Solenoid so that the gap "t1" and "t2" between Supply & Take-up Table and Supply & Take-up brake is 0.5mm+-0.2mm. (Figure M29)

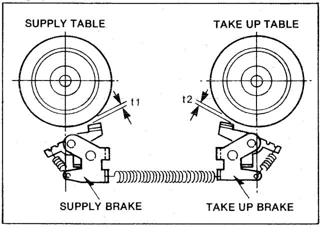

SUPPLY TABLE
TAKE UP TABLE
t1
t2
SUPPLY BRAKE
TAKE UP BRAKE

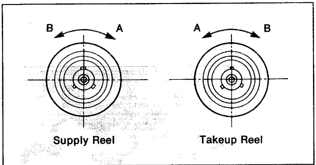
Figure M29

4-5. CONFIRMATION/ADJUSTMENT OF THE BRAKE TORQUE

Confirmation Procedure

* Equipment Required:
Torque Gauge............................VFK0133
Adaptor for Gauge.......................VFK0134

1. Remove the top cover and the cassette compartment.
2. Attach the adaptor to the torque gauge and place the deck in STOP mode.(Figure M31)
3. Place the torque gauge on the reel table.
The weight of the gauge should not rest on the reel table.
4. Turn the torque gauge in the direction indicated in Figure M30 until the brake begins slipping and read the gauge.



	A	B
Takeup	450~800g~cm	250~500g-cm
Supply		

Figure M30 Brake Torque Spec.

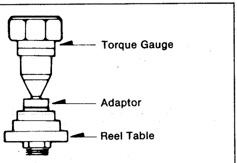


Figure M31 Measuring Method

Adjustment Procedure

To adjust the brake torque, move the spring to a different notch on the brake arm. Increase the brake torque by moving the spring to an outer notch and decrease the brake torque by moving the spring to an inner notch. (Figure M32)

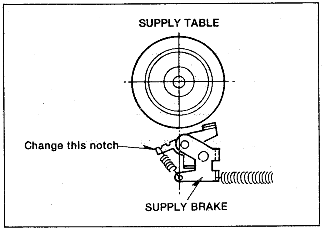


Figure M32 Adj. of Brake Torque

* Note:
If the proper brake torque cannot be obtained by changing the position of the spring, clean the braking surface of the reel table with a soft cloth and remeasure the brake torque. If it is still out of specification, replace the Brake Arm Unit.

4-6. CONFIRMATION OF THE FF TORQUE

* Equipment Required:
Dial Torque Gauge.......................VFK0133
Adaptor for Gauge.......................VFK0134

* Specifications:
Back Tension Torque....................3~15g–cm
Take–up Torque................more than 350g–cm

1. Remove the top cover and the cassette compartment.
2. Attach the adaptor to the torque gauge, and blind the take–up and supply photo transistors with pieces of black tape. Lower the cassette compartment and turn the power switch on.
3. Set the torque gauge on the supply reel table. Push the F.F. button and measure the back tension torque.

* Note:
While measuring, the weight of the gauge should not rest on the reel table.

4. Set the torque gauge on the take–up reel table. Push the FF button then use your hand to stop the supply reel table from rotating. Measure the take–up torque.

* Note:
There are no adjustments in this procedure. If the torque readings are off considerably, the rollers, idlers or reel tables may need replacement.

4-7. CONFIRMATION OF THE REW TORQUE

* Equipment Required:
Diakl Torque Gauge......................VFK0133
Adaptor for Gauge.......................VFK0134

* Specifications:
Back Tension Torque....................5~15g-cm
Take-up Torque.................more than 350g-cm

1. Remove the top panel and the cassette compartment.
2. Attach the adaptor to the Dial Torque Gauge and blind the take-up and supply photo transistors with pieces of black tape.
   Lower the cassette compartment and turn the power switch on.
3. Set the gauge on the take-up reel table. Push the REW button and measure the back tension torque.

* Note:
While measuring the weight of the gauge should not rest on the reel table.

4. Set the gauge on the supply reel table. Push the REW button, then use your hand to STOP the take-up reel table from rotating. Measure the take-up torque of the supply reel table.

4-8. MEASUREMENT AND ADJUSTMENT OF THE BACK TENSION

A. Measurement Procedure

* Equipment required:
Back Tension Meter (Tentelometer)........VFK0132
VHS Cassette Tape (240-minute tape)

* Specifications...........................25+-2g

1. Remove the top cover and the cassette compartment.
2. Pull the erase head in the direction indicated by the arrow in Figure M33 secure it with a piece of adhesive tape.
3. Play back the cassette tape from the beginning and wait until the tape movement has stabilized. (for approx. 10 to 20 seconds)
4. Insert tension meter over the tape and take a reading.

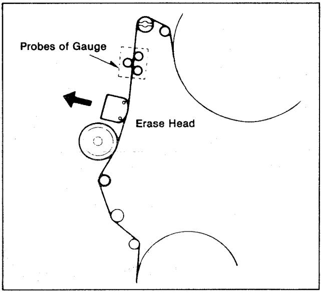


Figure M33 Measurement of Back Tension

* Note:
1. While measuring, make sure that the three probes of the meter are all in good contact with the tape, but out of contact with the supply inertia roller.
2. As the tension meter is very sensitive, we recommended taking 3 separate readings.

B. Adjustment Procedure

* Equipment Required:
Fine Adjustment Screwdriver...........(VFK0330)

1. Remove the top cover and the cassette compartment.
2. Loosen the screw (A) and insert the fine adjustment screwdriver into the hole (B). (Figure M34)
3. Move the adjustment screwdriver in either of the directions indicated by the arrow in Figure M34 to obtain the specified tension. Turn the driver clockwise to decrease the tension, counter-clockwise to increase it.
4. Tighten the screw (A) and remeasure the tension with the meter to confirm it.

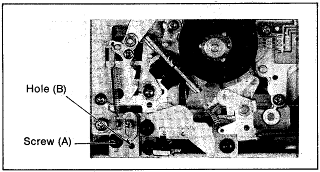


Figure M34

4-9. ADJUSTMENT OF THE REEL TABLE HEIGHTS

* Equipment required:
Post Adjustment Plate..................VFK0191
Reel Table Height Fixture...............VFK0191

* Specification:
0mm+-0.1mm

1. Remove the Cassette Compartment.
2. Place the Post Adjustment Plate over the reel tables.
3. Place the Reel Table Height Gauge on the plate so that the scraper on the gauge touches the cut-out portion of the plate, then set the gauge to zero ("0"). (Figure M35)

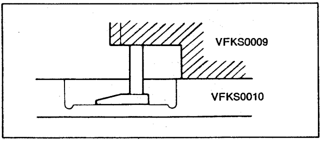


Figure M35

4. Measure the height of the top surface of either reel table and note the difference in height from the plate cut-out. (Figure M35 and M36)
   Repeat this procedures for the other reel table.

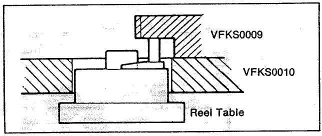


Figure M36

5. If the difference is more than 0.1mm higher or lower, replace the poly slider washer located under the reel table with one of the appropriate thickness. Poly slider washers are avilable in thickness of 0.13mm, 0.25mm and 0.5mm.

4-10. ADJUSTMENT OF CAM GEAR

General Description:
The mechanism of this model is primarly engaged to the electrical System Control Circuit through the mode select switch. Therefore, the relation of the mode switch and the cam gear decides all further mechanical movement of the mechanical parts such as levers, gears, rollers and so on.
If the cam gear and the mode select switch are improperly adjusted, the deck will either unload the tape or stop automatically, and may result in damage to certain mechanical or electrical parts.

4-10-1. PRELIMINARY ADJUSTMENT PROCEDURE

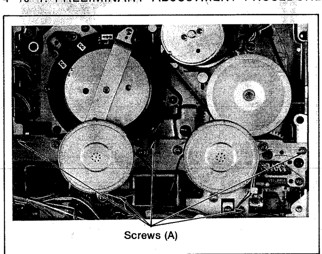


Figure M37 Sub-Chassis

Unscrew the 5 screws (A) (Figure M37) and remove the sub-chassis with Reel motors, fast, loosen the Hex Screws (B) (Figure M38) and remove the reel tables and remove the connectors.

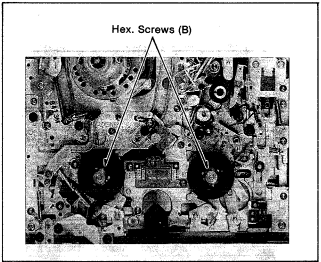


Figure M38 Reel Table

To remove the large pulley, unscrew the 1 screw (C) (Figure M39) and remove the 2 retaining rings (D), and remove the large pulley.

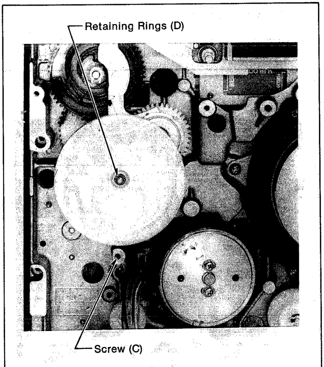


Figure M39 Large Pully Belt Cover

To remove the sector gear, unscrew the 1 nut (E) (Figure M40) and remove the holder, then remove the 1 retaining ring (F) and remove the sector gear.

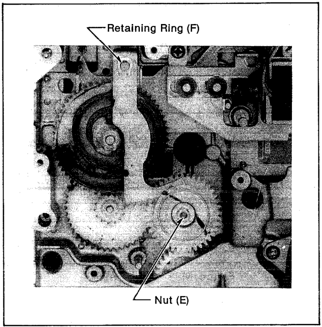

Retaining Ring (F)
Nut (E)

Figure M40 Select Gear

4–10–2. ADJUSTMENT PROCEDURE

1. Turn the Loading Gear clockwise until posts P2 and P3 are unloaded position. (Figure M41)

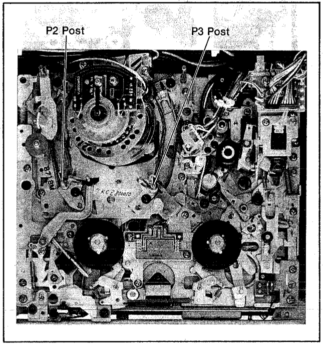

P2 Post
P3 Post

Figure M41 Unloading Position

2. Install the action gear so that the hole in the action gear meets the projection on the loading gear. Be sure that the loading gear is still in the fully unloaded condition. (Figure M42)

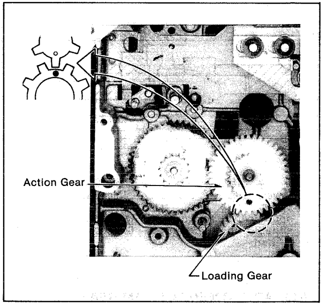

Action Gear
Loading Gear

Figure M42

3. Slowly slide the main rod so that the holes meet together. (Figure M43)

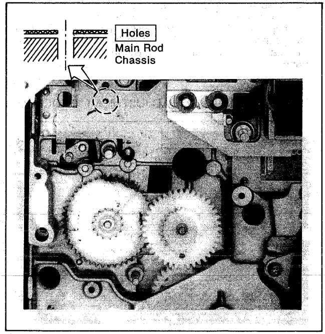

Holes
Main Rod
Chassis

Figure M43

4. Insert the cam gear so that the hole (A) on the gear meets the hole in the main rod. To make alignment easier, use a small hex wrench (VFK0326) or metal pin. Check to see that the two V–shaped marks are still aligned. (Figure M44)

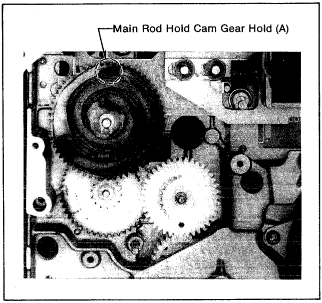

Main Rod Hold Cam Gear Hold (A)

Figure M44

5. Install the sector gear so that the pin on the sector gear meets the inner slot of the cam gear (simple slot side). Install the 2 retaining rings on the cam and sector gears. (Figure M45)

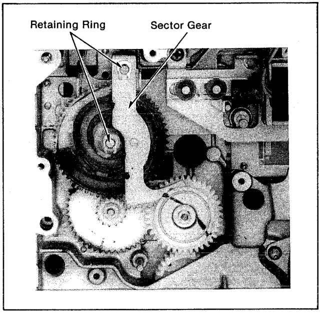

Retaining Ring
Sector Gear

Figure M45

6. The gear configuration should now be as shown in Figure M46.

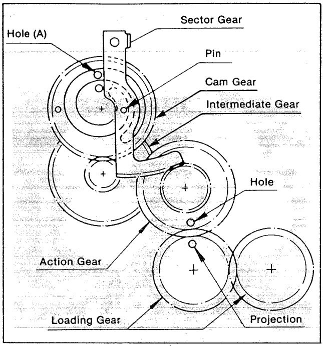

Sector Gear
Hole (A)
Pin
Cam Gear
Intermediate Gear
Hole
Action Gear
Loading Gear
Projection

Figure M46

7. Install the gear protector and tighten the mounting nut. Install the large gear so that the teeth of the gear mesh with the outer teeth of the intermediate gear, and install the retaining ring. (Figure M47)

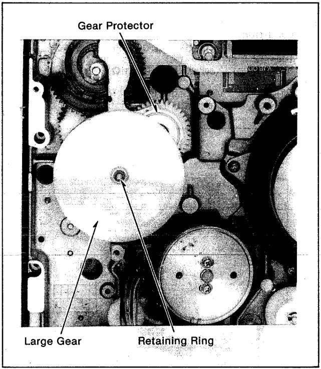

Gear Protector
Large Gear
Retaining Ring

Figure M47

8. Install the belt. (Figure M48)
Turn the large pulley in both directions and confirm that the mechanism operates smoothly.

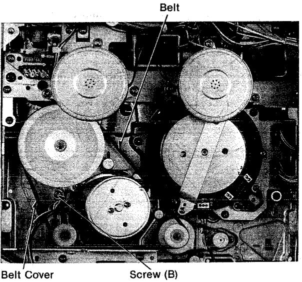


Figure M48

4-11. ADJUSTMENT OF THE MODE SELECT SWITCH

1. Set the main rod in the unloading completion condition.
2. To adjustment the mode select switch, loosen the 2 screws (A) then insert the fine adjustment screwdriver into the adjustment hole (B).
3. Align the V–shaped notch of the switch with the tab on the main rod. (Figure M49)

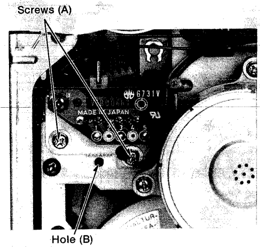


Figure M49

ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical adjustment procedures which may be required for electronic circuits of VHS Video Cassette recorders.

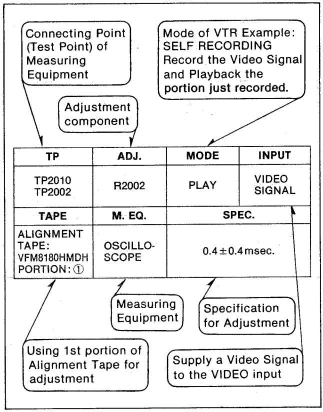
1. TEST AND SERVICE EQUIPMENT

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range: 0.001 to 50V
2. Dual–Trace Oscilloscope
   Voltage Range: 0.005 to 50V/div.
   Frequency Range: DC to 20MHz
   Probes: 10:1 or 1:1
3. Frequency Counter
   Frequency Range: 0 to 10MHz
4. Signal Generator (Sinewave)
   Frequency Range: 0 to 10MHz
5. Video Sweep Generator
   Frequency Range: 0 to 10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. Spectrum Analyzer
9. Video Signal Generator
10. VHS Alignment Tape (VFM8180HMDH)

2. ADJUSTMENT PROCEDURES

2-1. HOW TO READ THE ADJUSTMENT PROCEDURES


Connecting Point (Test Point) of Measuring Equipment
Mode of VTR Example: SELF RECORDING Record the Video Signal and Playback the portion just recorded.
Adjustment component
Measuring Equipment
Specification for Adjustment
Using 1st portion of Alignment Tape for adjustment
Supply a Video Signal to the VIDEO input

TP	ADJ.	MODE	INPUT
TP2010 TP2002	R2002	PLAY	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE: VFM8180HMDH PORTION: ①	OSCILLO-SCOPE	0.4±0.4msec.	

Figure E1

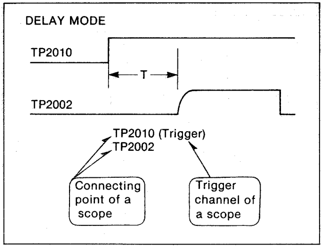

DELAY MODE
TP2010
T
TP2002
TP2010 (Trigger)
TP2002
Connecting point of a scope
Trigger channel of a scope

Figure E2

Note:
Unless there are any specified sentences, input point for the input signal is VIDEO IN (LINE IN). In that case, set the input select switch to LINE mode.

2-2. POWER SUPPLY SECTION

2-2-1. +5V ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP1007	VR1001		
TAPE	**M. EQ.**	**SPEC.**	
	D.V.M.	5±0.1V	

2-3. SERVO SECTION

2-3-1. CYLINDER SERVO REF. PULSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP2003	VR2002	PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO-SCOPE	T=V. SYNC PORTION ±0.25H	

1. Set the switches to the following position.
   *INPUT Select Switch–LINE position
   *SYNC Select Switch–NORM position
   *FRAME SERVO Switch–OFF position
2. Input the colour bar signal to LINE IN.

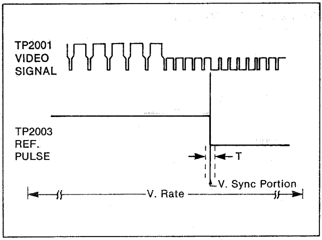

TP2001
VIDEO
SIGNAL
TP2003
REF.
PULSE
T
V. Sync Portion
V. Rate

Figure E3

2-3-2. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30020 TP2002	VR2007 (PG2) VR2008 (PG1)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO- SCOPE	T1=6.5H±0.25H T2=LESS THAN 10μsec.	

* Note:
This adjustment should be performed only after completion of the tape interchangeability adjustment.

1. Set the switches to the following position.
   - * SYNC Select Switch–NORM position
   - * FRAME SERVO Switch–OFF position
2. Set the triggering slope of scope to "−" side, and expand the V sync portion of the signal.
3. Adjust VR2008 (PG1) so that the falling edge of switching pulse becomes 6.5H +/− 0.25H before the V sync portion. (Figure E4)

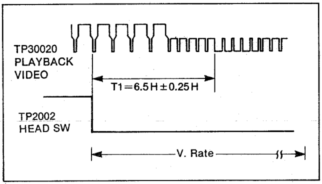

TP30020
PLAYBACK
VIDEO
T1=6.5H±0.25H
TP2002
HEAD SW
V. Rate

Figure E4

4. Change the triggering slope of the scope from "−" to "+" side, and adjust VR2007 (PG2) so that the difference between the rising and falling edges becomes less than 10usec. (Figure E5)

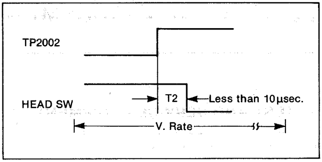

TP2002
HEAD SW
T2
Less than 10μsec.
V. Rate

Figure E5

2-3-3. TRACKING FIX ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP2002	VR2001	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO- SCOPE	T=0.4msec.±0.1msec.	

1. Set the switches to the following position.
   - * SYNC Select Switch–NORM position
   - * FRAME SERVO Switch–OFF position
2. Adjust the Tracking VR on the Front Panel to the centre fix position.

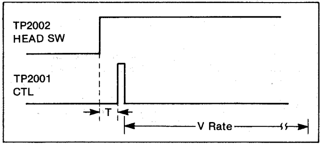

TP2002
HEAD SW
TP2001
CTL
T
V Rate

Figure E6

2-3-4. SS HEAD SWITCH ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30020 TP2010	VR2011	PLAY (FWD×2)	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO- SCOPE	T=V. SYNC PORTION ±0.25H	

* Note:
This adjustment should be performed only after adjusting the PG shifter adjustment.

1. Set the SYNC Select Switch to NORM position.
2. Press the SEARCH key and set the SEARCH DIAL for FWD X2 position.

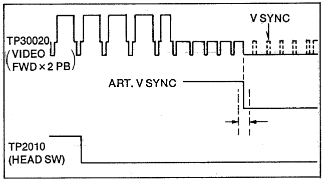

V SYNC
TP30020
(VIDEO FWD×2 PB)
ART. V SYNC
TP2010
(HEAD SW)

Figure E7

2-4. SYSTEM CONTROL SECTION

2-4-1. HD AUDIO HEAD SWITCH SHIFTER ADJUSTMENT

* Note:
This adjustment should be performed only after adjusting the PG shifter adjustment.

TP	ADJ.	MODE	INPUT
TP6005	VR6004	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO-SCOPE	T=13.33±0.03msec.	

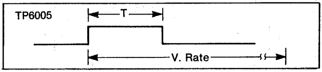

TP6005
T
V. Rate

Figure E8

2-4-2. FLYING ERASE HEAD CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP (HOT) GND (GND) (Measuring Circuit)	VR6001 (Ⓐ) VR6002 (Ⓑ)	VIDEO INSERT	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
ORDINALY SP RECORDED TAPE	OSCILLO-SCOPE (More than 50MHz)	120±10mV (for 100MHz Oscilloscope) or 110±10mV (for 50MHz Oscilloscope)	

* Note:
To make this adjustment, please the following circuit. (Figure E9)

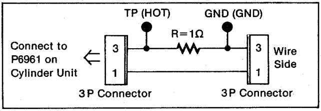
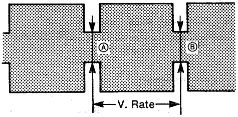

TP (HOT)
GND (GND)
R=1Ω
Connect to P6961 on Cylinder Unit
3
1
3
1
Wire Side
3P Connector
3P Connector

Figure E9

1. Connect the above Measuring Circuit (1) at connector P6961 on the Cylinder Unit.
2. Connect the scope to TP (HOT) and GND on the Measuring Circuit (1).
3. Play back the ordinary SP recorded tape, and press the INSERT VIDEO/HD key.
4. Press the EDIT START key.



Ⓐ=Ⓑ=120±10mV (When 100MHz Oscilloscope is used)
or
Ⓐ=Ⓑ=110±10mV (When 50MHz Oscilloscope is used)

Figure E10

2-4-3. FLYING ERASE HEAD SWITCH SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP6004	VR6003	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO-SCOPE	$T=6.72^{+0}_{-0.05}$msec.	

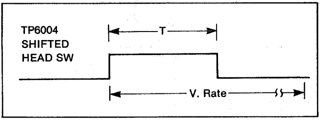

TP6004
SHIFTED
HEAD SW
T
V. Rate

Figure E11

2-5. Y/C SEP. SECTION

2-5-1. AGC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP32001	VR32001	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK	OSCILLO-SCOPE	0.8±0.01Vp-p	

1. Set the VIDEO LEVEL Switch to AGC position.

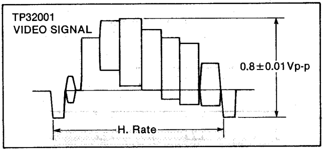

TP32001
VIDEO SIGNAL
0.8±0.01Vp-p
H. Rate

Figure E12

2-5-2. PLL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP32002 TP32001	VR32002	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	SEE Figure E13	

1. Set the INPUT SELECT SW to LINE position.
2. Adjust VR32002 so that the burst portion is well balanced at TP2 as shown below.

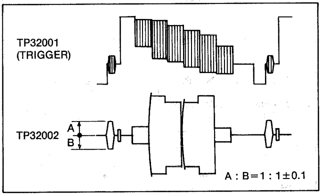

TP32001
(TRIGGER)
TP32002
A
B
A : B=1 : 1±0.1

Figure E13

2-6. LUMINANCE, CHROMINANCE & HEAD AMP SECTION

2-6-1. SUB EMPHASIS LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30002	VR30003	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	400±10mVp-p	

* Note:
This adjustment should be performed only after "AGC LEVEL ADJUSTMENT".

1. Supply colour bar signal to S–Video input or P6451–1 on S–VIDEO INPUT C.B.A.
2. Set the input select switch on the front panel to S–Video position.

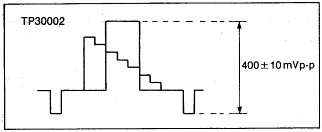

TP30002
400±10mVp-p

Figure E14

2-6-2. HF EQUALIZER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30002	VR30001	STOP (E-E)	VIDEO SWEEP
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	WAVEFORM is FLAT (100kHz~4MHz)	

1. Set the markers of the sweep generator as follows and connect to VIDEO IN connecter.
2. Adjust VR30001 so that the waveform becomes flat.

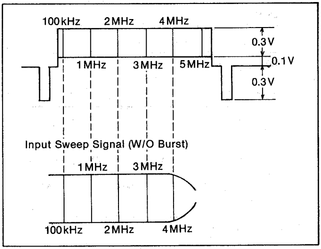

100kHz
2MHz
4MHz
0.3V
1MHz
3MHz
5MHz
0.1V
0.3V
Input Sweep Signal (W/O Burst)
1MHz
3MHz
100kHz
2MHz
4MHz

Figure E15

2-6-3. SUB EMPHASIS LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30002	VR30002	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	400±10mVp-p	

* Note:
This adjustment should be performed only after "AGC LEVEL ADJUSTMENT".

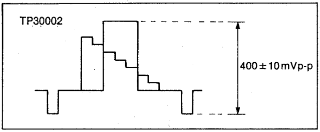


Figure E16

2-6-4. SUB EMPHASIS LIMITER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30010	VR30012	S-VHS STOP (E-E)	
TAPE	**M. EQ.**	**SPEC.**	
	D.V.M.	3.33±0.03V	

2-6-5. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
PIN 30 OF IC59	VHS: VR30004 S-VHS: VR30002 VR30006	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	SEE FIGURE E18	

Note:
Before this adjustment, "SUB EMPHASIS LEVEL ADJUSTMENT" should be completed.

VHS MODE
1. Set the VIDEO LEVEL Switch to AGC.
2. Turn the S–VHS Switch OFF.
3. Supply a colour bar signal to the VIDEO INPUT on the rear panel.
4. Connect a scope to pin 30 of IC59 with an 1 : 1 probe.
5. Supply a 4.8MHz sinewave signal at −40dB (0.028Vp–p) to TP30004 through a 0.01uF capacitor. Set the frequency precisely with a frequency counter.
6. Adjust VR30004 so that the beat on the white peak portion of the signal becomes minimum as shown in Figure E17.

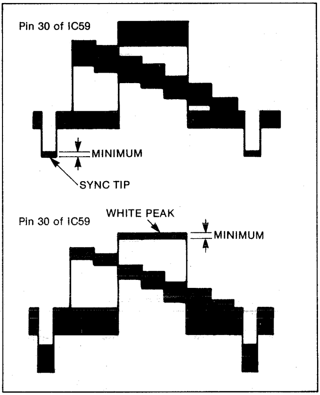


Figure E17

S–VHS MODE
1. Set the VIDEO LEVEL Switch to AGC.
2. Turn the S–VHS Switch ON.
3. Supply a colour bar signal to the VIDEO INPUT on the rear panel.
4. Connect a scope to pin 30 of IC59 with an 1 : 1 probe.
5. Turn VR30008 fully clockwise and VR30007 fully counterclockwise.
6. Supply a 5.4MHz sinewave signal at −40dB (0.028Vp–p) to TP30006 through a 0.01uF capacitor. Set the frequency precisely with a frequency counter.
7. Adjust VR30005 so that the beat on the sync tip portion of the signal becomes minimum as shown in Figure E17.
8. Next, supply a 7.0MHz sinewave signal at −40dB (0.028Vp–p) to TP30006 through a 0.01uF CAPACITOR. Set the frequency precisely with a frequency counter.
9. Adjust VR30006 so that the beat on the white peak portion of the signal becomes minimum as shown in Figure E17.

2-6-6. WHITE & DARK CLIP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30003	VR30007 (DARK) VR30008 (WHITE)	S-VHS STOP (E-E)	SIN^2 PULSE & BAR
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	200±5% (WHITE CLIP) 70±5% (DARK CLIP)	

Note:
Before this adjustment "DEVIATION ADJUSTMENT" should be completed.

1. Turn the S-VHS SW ON.

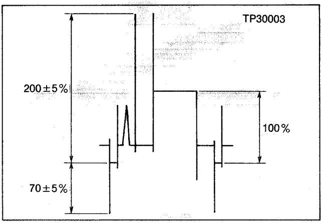


Figure E18

2-6-7. PLAYBACK SUB EMPHASIS LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30013	VR30051	S-VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	400±10mVp-p	

1. Turn the S-VHS SW ON.

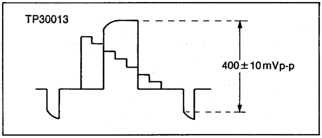


Figure E19

2-6-8. PLAYBACK SUB DEEMPHASIS LIMITER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30012	VR30052	S-VHS STOP (E-E)	
TAPE	**M. EQ.**	**SPEC.**	
	D.V.M.	3.33±0.03V	

2-6-9. 4P Y LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30022	VR30053 VR30058	VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2.0±0.05Vp-p	

Note:
Before this adjustment, "PLAYBACK SUB DEEMPHASIS LEVEL ADJUSTMENT" should be completed.

1. Supply a colour bar signal to video input in AGC mode.
2. Set the image switch to EDIT mode.
3. First turn the S-VHS switch OFF.
4. Adjust VR30058 to 2.0+/−0.05Vp−p at TP30022.
5. Turn the S-VHS switch ON.
6. Adjust VR30053 to 2.0+/−0.05Vp−p at TP30022.

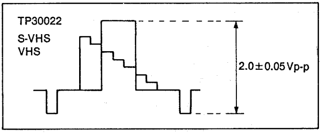


Figure E20

2-6-10. DROP OUT Y LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30025	VR30057	S-VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	NO WAVEFORM	

1. Turn the S-VHS switch ON.
2. Adjust VR30057 so that there is no waveform at TP30025.

2-6-11. CCD BIAS ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30024	VR30064	S-VHS STOP (E-E)	SIN^2 PULSE & BAR
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2T PULSE: MAXIMUM	

Note:
Before this adjustment, "4P Y LEVEL ADJUSTMENT" should be completed.

1. Set the image switch to NORMAL mode and turn the S-VHS switch ON.

2. Adjust VR30064 so that the gain of 2T pulse is maximum.

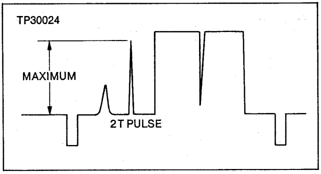


Figure E21

2-6-12. CCD OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30022	VR30067	S-VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2±0.05Vp-p	

Note:
Before this adjustment, "4P Y LEVEL ADJUSTMENT" and CCD BIAS ADJUSTMENT should be performed.

1. Set the image switch to NORMAL mode and turn the S-VHS switch ON.

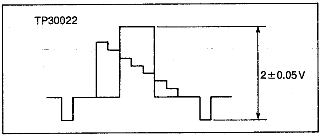


Figure E22

2-6-13. DUB OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30023	VR30063	S-VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	1±0.1Vp-p	

Note:
Before this adjustment, "4P Y LEVEL ADJUSTMENT" should be performed.

1. Set the VIDEO LEVEL Switch to AGC position.

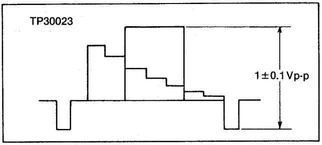


Figure E23

2-6-14. RECURSIVE LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30016	VR30061	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	CYAN LEVEL= 500±50mVp-p	

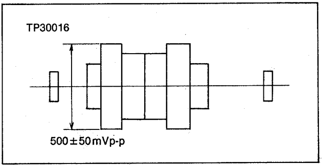


Figure E24

2-6-15. RECURSIVE FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30017	VR30060 VR30059	STOP (E-E)	RED RASTER (100% CHROMA SIGNAL (RED))
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	A=MINIMUM	

3. Adjust VR30060 and VR30059 so that level "A" becomes minimum.

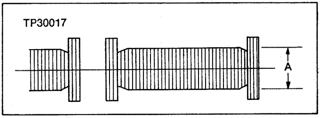


Figure E25

2-6-16. S-VIDEO C OUTPUT LEVEL ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
TP30021	VR30068	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	1.3±0.06Vp-p	

1. Adjust VR30068 so that the cyan level becomes 1.3+/−0.06Vp−p at TP30021.

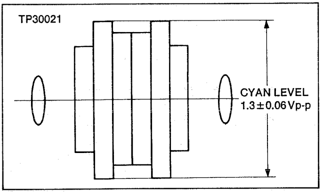


Figure E26

2-6-17. VIDEO OUTPUT LEVEL ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
VIDEO LINE OUT	VR30055 VR30062	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	WAVEFORM MONITOR	1.0±0.02Vp-p (VIDEO LEVEL) 0.6±0.03Vp-p (CYAN LEVEL)	

*Note:
Before this adjustment, "Recursive Filter Adjustment" "4P Y Level Adjustment," "S-VIDEO C Output Level Adjustment" and "CCD Output Level Adjustment" should be completed.

1. Set the VIDEO LEVEL Switch to AGC position.
2. Supply the Video Output Signal to a waveform monitor.
3. Adjust VR30055 so that the video level becomes 1.0+/−0.02Vp−p.
4. Adjust VR30062 so that the cyan level becomes 0.6+/−0.03Vp−p.

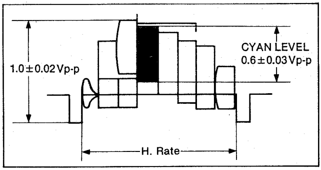


Figure E27

2-6-18. REC CURRENT ADJUSTMENT (1)

TP	**ADJ.**	**MODE**	**INPUT**
TP5002 (HOT) TPG5001 (GND)	VR30009 VR8002	VHS REC	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK	OSCILLO-SCOPE	30±2mVp-p (C) 140±5mVp-p (Y)	

Note:
Rec current adjustments must be done by the following procedures :
Adjust VR8002 −> VR8001 −> VR8003 −> VR30009 −> VR30010.

1. Turn the S−VHS SW OFF, and the HD REC SW ON.
2. Connect the scope to TP5002(HOT) and TPG5001(GND) on the REC/HEAD AMP C.B.A.
3. Turn VR30009 fully clockwise.
4. Adjust VR8002 so that the cyan level becomes 30+/−2mVp−p.
5. Adjust VR30009 so that the sync tip level becomes 140+/−5mVp−p.

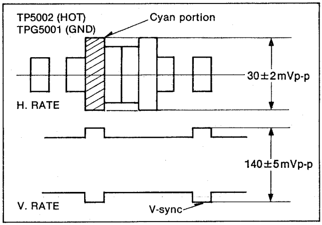


Figure E28

2-6-19. REC CURRENT ADJUSTMENT (2)

TP	**ADJ.**	**MODE**	**INPUT**
TP5002 (HOT) TPG5001 (GND)	VR30010 VR8001	S-VHS REC	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	30±2mVp-p (C) 150±5mVp-p (Y)	

Note:
Rec current adjustments must be done by the following procedures :
Adjust VR8002 −> VR8001 −> VR8003 −> VR30009 −> VR30010.

1. Turn the S−VHS SW ON, and the HD REC SW ON.
2. Connect the scope to TP5002(HOT) and TPG5001(GND).
3. Turn VR30010 fully clockwise.
4. Perform VR8001, so that the cyan level becomes 30+/−2mVp−p.

5. Next adjust VR30010 so that the sync tip level becomes 150+/−5mVp−p.

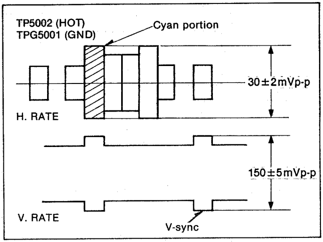


Figure E29

2-6-20. DUB C RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP5001	VR8003	S-VHS REC	COLOR BAR SIGNAL from SOURCE VCR
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	30±2mVp-p	

Note:
Rec corrent adjustments must be done by the following procedures :
Adjust VR8002 –> VR8001 –> VR8003 –> VR30009 –> VR30010.

1. Set the INPUT SELECT SW to DUB and HD REC SW to ON.
2. Connect a 7−pin dubbing cable between the second AG−7500 (as color bar signal source) and the AG−7500 (to be adjusted).
3. Play back a self recorded color bar tape on the source AG−7500 and confirm that chroma input level from the source deck is 900+/−10mV at TP8003 on the CHROMA C.B.A.
4. Place the deck in the RECORD mode.
5. Connect the scope to TP5001.
6. Turn VR30010 fully clockwise so that the luminance recording current becomes minimum.
7. Adjust VR8003 so that the cyan level becomes 30+/−2mVp−p.
8. Perform 2−6−19, REC CURRENT ADJUSTMENT (2).

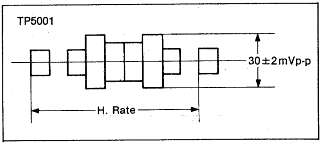


Figure E30

2-6-21. PL. B PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8001 VIDEO OUT	VR8006 VR8007	S-VHS STOP (E-E)	FLAT FIELD W/BURST
TAPE	**M. EQ.**	**SPEC.**	
	VECTOR SCOPE	90±5 DEGREES TO U (P_B) AXIS	

1. Connect VIDEO OUT on AG7500 to the CHA input on the vectorscope.
2. Connect TP8001 to EXT CW on the vectorscope.
3. Set the vectorscope to EXT SYNC mode and ∅ REF EXT mode.
4. Turn VR8007 fully clockwise.
5. Adjust VR8006 so that the phase of the pilot burst is 90+/−5 degrees to U (P6) axis.

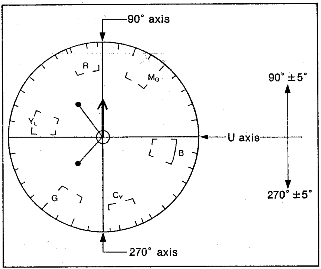


Figure E31

2-6-22. DUB PL. B PHASE & LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8007 TP8008 VIDEO OUT	VR8007 VR8008 VR8009	DUB S-VHS E-E	50% FLAT FIELD
TAPE	**M. EQ.**	**SPEC.**	
	VECTOR SCOPE	90±5 DEGREES To U (Pb) AXIS 110%±5%	

1. Connect VIDEO out on AG7500 to the CHA input on the vectorscope.
2. Connect TP8008 to EXT CW on the vectorscope.
3. Set the vectorscope to EXT SYNC mode and REF EXT mode.
4. Supply a 50% FLAT FIELD signal to DUB IN from the source deck.
5. Turn VR8007 fully clockwise.
6. Turn VR8009 to its centre position and adjust VR8008 so that the phase of the pilot burst is 90+/−5 degrees to U (Pb) axis.
7. Connect the scope to TP8007.
8. Adjust VR8009 so that the pilot burst level is 110+/−5% to the burst level.
9. Repeat items 6 through 8 to get appropreate values.

2-6-23. PL. B MUTE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8006 TP8004	VR8007	S-VHS STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	1μs±100ns	

Note:
Before this adjustment, "PL.B PHASE ADJUSTMENT" and " DUB PL.B PHASE & LEVEL ADJUSTMENT" should be completed.

1. Connect the scope CH1 to TP8006 and CH2 to TP8004.

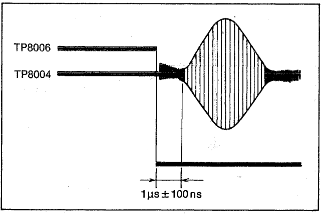

TP8006
TP8004
1μs±100ns

Figure E32

2-6-24. DUB CHROMA OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8004	VR8005	S-VHS PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	900±20mVp-p	

1. Connect the DUB out and the DUB IN by dubbing cable.
2. Play back the color bar signal which is self recorded.

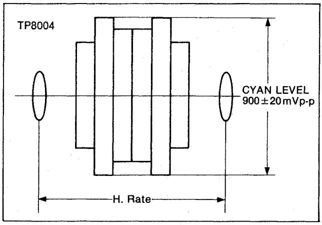

TP8004
CYAN LEVEL
900±20mVp-p
H. Rate

Figure E33

2-6-25. S-VHS DETECT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31004	VR5001	S-VHS PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	200±20mVp-p	

1. Play back the self recorded portion.

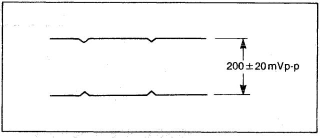


Figure E34

2-6-26. S-VHS RF EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31005 TP30022	VR31001 VR31007 VR31009 VR31011	S-VHS PLAY	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	100kHz : 4MHz=5 : 4	

1. Supply a Video sweep signal as shown below to VIDEO IN.
2. Record a video sweep signal in S–VHS mode and play back just recorded portion.
3. Set the image switch to EDIT mode and turn the notch filter OFF.
4. Turn VR31007 fully counterclockwise.
5. Connect the scope to TP31005 and keep VR31009 and VR31011 to the centre position.
6. Adjust VR31001 to 900mVp–p.
7. Connect the scope to TP30022.
8. Adjust VR31009 and VR310011 as shown below.

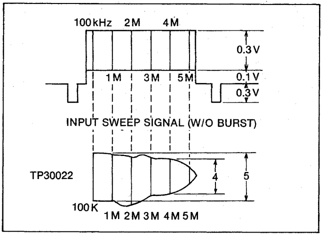

100kHz 2M 4M
0.3V
1M 3M 5M
0.1V
0.3V
INPUT SWEEP SIGNAL (W/O BURST)
TP30022
4
5
100K
1M 2M 3M 4M 5M

Figure E35

2-6-27. S-VHS RF LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31005	VR31001 VR31007	S-VHS PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	750±50mVp-p 900±50mVp-p	

Note:
Before this adjustment, "S–VHS RF EQ ADJUSTMENT" should be completed.

1. Supply a video sweep signal as shown below to VIDEO IN.
2. Record a video sweep signal and play back just recorded portion in STILL mode.
3. Connect the scope to TP30022.
4. Adjust VR31008 and VR31011 as shown below.

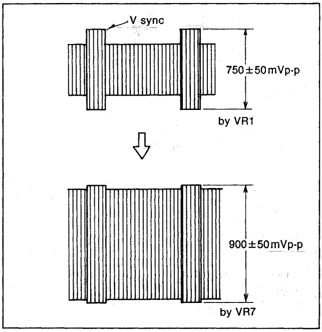

V sync
750±50mVp-p
by VR1
900±50mVp-p
by VR7

Figure E36

2-6-28. SS RF EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30022	VR31008 VR31010	S-VHS STILL	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	100kHz : 3MHz=5 : 3±0.5	

Note:
Before this adjustment, "S–VHS RF EQ ADJUSTMENT" should be completed.

1. Record a colour bar signal and play back just recorded portion.
2. Turn VR31007 fully counterclockwise.
3. Connect the scope to TP31005.
4. Adjust VR31001 to 750+/–50mVp–p.
5. Adjust VR31007 to 900+/–50mVp–p.

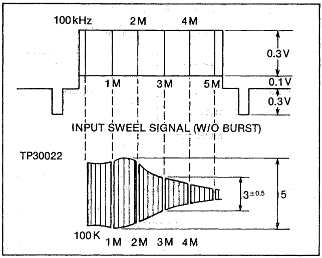

100kHz
2M
4M
0.3V
1M
3M
5M
0.1V
0.3V
INPUT SWEEL SIGNAL (W/O BURST)
TP30022
3±0.5
5
100K
1M 2M 3M 4M

Figure E37

2-6-29. VHS RF EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30022 TP31005	VR31004 VR31002 VR31003	VHS PLAY	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK	OSCILLO-SCOPE	900mVp-p 100kHz : 2MHz=5 : 5±0.5	

Note:
Before this adjustment, "S–VHS RF EQ ADJUSTMENT" and "S–VHS RF LEVEL ADJUSTMENT" should be performed.

1. Supply a video sweep signal as shown below to VIDEO IN.
2. Record a video sweep signal in VHS mode and play back just recorded portion.
3. Set the image switch to EDIT mode and Turn the notch filter OFF.
4. Keep VR31002 and VR31003 to the centre position.
5. Connect the scope to TP31005 and adjust VR31004 to 900mVp–p.
6. Connect the scope to TP30022 and adjust VR31002 and VR31003 as shown below.
7. Repeat item 5 and 6 to satisfy its specification.

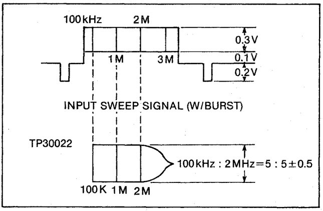

100kHz
2M
0.3V
1M
3M
0.1V
0.2V
INPUT SWEEP SIGNAL (W/BURST)
TP30022
100kHz : 2MHz=5 : 5±0.5
100K 1M 2M

Figure E38

2-6-30. DIFFERENTIAL GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR8004	PLAY	5 STEP VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK	WAVE FORM MONITOR	A=+5%	

*Note:
Before this adjustment, "Dub Y Out Level Adjustment" should be completed.

1. Supply a 5 step Video Signal to the video Input and make a short recording.
2. Play back the just recorded portion.
3. Connect the Video Output to a waveform monitor and set RESPONSE to 4.43MHz.
4. Adjust VR8004 so that level becomes +5%.

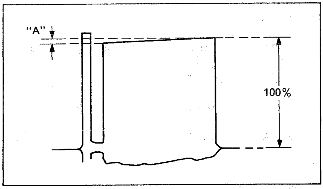


Figure E39

2-6-31. RF OUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31003	VR31005	S-VHS PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	OSCILLO-SCOPE	1.0±0.1Vp-p	

Note:
Before this adjustment, "TRACKING FIX ADJUSTMENT" and "RF LEVEL ADJUSTMENT" should be completed.

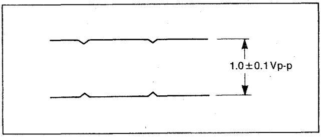


Figure E40

2-6-32. VIDEO LEVEL METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO LEVEL METER	VR30011	STOP (E-E)	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
		SEE Figure E41	

Note:
This adjustment should be performed after adjusting the "AGC LEVEL ADJUSTMENT".

1. Set the "VIDEO LEVEL CONTROL" on the Front Panel to AGC position (push).
2. Adjust VR30011 so that the needle of VIDEO LEVEL METER becomes at point "A" as shown in Figure E41.

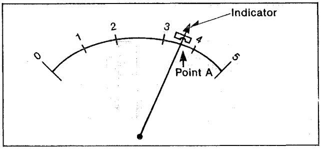


Figure E41

2-6-33. TRACKING METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TRACKING METER	VR31006	S-VHS PLAY	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
S-VHS SELF RECORDED TAPE		SEE FIGURE E42	

Note:
Before this adjustment, "TRACKING FIX ADJUSTMENT", "VIDEO LEVEL METER ADJUSTMENT" and "RF LEVEL ADJUSTMENT" should be completed.

1. Turn the S–VHS SW ON.
2. Play back the S–VHS self recorded tape.
3. Set the TRACKING VR on the front panel to the center.
4. Adjust VR31006 so that the TRACKING METER needle reaches point "B" as shown below.

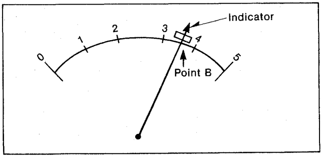


Figure E42

2-7. NORMAL AUDIO SECTION

Note:
Unless otherwise specified, set the following switches to the following positions.

SWITCH/VR	POSITION
AUDIO INPUT LEVEL VRs	CENTRE POSITION
AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO MIX REC	OFF
AUDIO INPUT LEVEL SELECT/ AUDIO OUT LEVEL SELECT	0dBs

Also the following connection is used to check the output levels from AUDIO OUT jacks (XLR).

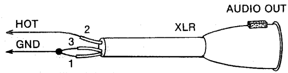


Figure E43

2-7-1. AUDIO INPUT SIGNAL LEVEL ADJUSTMENT

TP	ADJ.			MODE	INPUT
NORM/HD OUT (CH1/CH2)		NORM	HD	STOP (E-E)	1kHz, 0dBm AUDIO SIGNAL
	CH1	VR6303	VR6301		
	CH2	VR6304	VR6302		
TAPE	M. EQ.			SPEC.	
	V.T.V.M. w/600Ω TERMINATION			0±0.2dBm (=0.775Vrms=2.19Vp-p)	

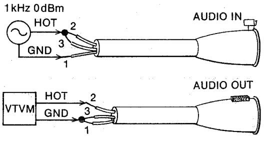
1. Set the AUDIO OUT SELECT switch on the pocket SW to NORM position.
2. Adjust VR6303 and VR6304 on the front panel C.B.A. to 0+/−0.2dBm.
3. Set the AUDIO OUT SELECT switch on the pocket SW to HD position.
4. Adjust VR6301 and VR6302 on the front panel C.B.A. to 0+/−0.2dBm.

2-7-2. AUDIO JACK ADJUSTMENT (1)

TP	ADJ.			MODE	INPUT
NORM/HD OUT (CH1/CH2)		NORM	HD	STOP (E-E)	1kHz, 0dBm AUDIO SIGNAL
	CH1	VR4503	VR4501		
	CH2	VR4504	VR4502		
TAPE	M. EQ.			SPEC.	
	V.T.V.M. w/600Ω TERMINATION			−40dBm OR LESS (=0.245Vrms=0.69Vp-p)	

Note:
Before this adjustment, "AUDIO INPUT SIGNAL LEVEL ADJUSTMENT" should be completed.

1. Set the HD REC INPUT switch to HD position and the AUDIO OUT SELECT switch to NORM position on the pocket SW.
2. Connect SG and VTVM as shown below and adjust VR4503 and VR4504 on the audio jack C.B.A. to −40dBm or less.
3. Change the position of AUDIO OUT SELECT switch on the pocket SW to HD.
4. Adjust VR4501 and VR4502 on the audio jack C.B.A. to −40dBm or less.
5. Perform "AUDIO INPUT SIGNAL LEVEL ADJUSTMENT" again if these volumes are adjusted.



CONFIRM & ADJUST FOR EACH CHANNEL OF NORMAL & HD AUDIO

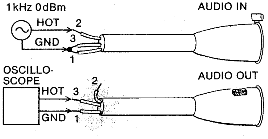
Figure E44

2-7-3. AUDIO JACK ADJUSTMENT (2)

TP	ADJ.			MODE	INPUT
NORM/HD OUT (CH1/CH2)		NORM	HD	STOP (E-E)	1kHz, 0dBm AUDIO SIGNAL
	CH1	VR4507	VR4505		
	CH2	VR4508	VR4506		
TAPE	M. EQ.			SPEC.	
	OSCILLOSCOPE			68mVp-p OR LESS	

Note:
Before this adjustment, "AUDIO INPUT SIGNAL LEVEL ADJUSTMENT" and "AUDIO JACK ADJUSTMENT (1)" should be completed.

1. Set the HD REC INPUT switch to HD position and the AUDIO OUT SELECT switch to NORM position on the pocket SW.
2. Connect SG and OSCILLOSCOPE as shown below and adjust VR4507 and VR4508 to 68mVp−p or less for NORMAL AUDIO.
3. Adjust VR4505 and VR4506 to 68mVp−p or less for HD AUDIO.
4. Perform "AUDIO INPUT SIGNAL LEVEL ADJUSTMENT" again if these volumes are adjusted.



CONFIRM & ADJUST FOR EACH CHANNEL OF NORMAL & HD AUDIO

Figure E45

2-7-4. AUDIO METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO METER	VR4009 (CH1) VR4010 (CH2)	STOP	1kHz, 0dBm AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
		0±0.5VU	

*Note:
Before this adjustment "Audio Input signal Level Adjustment" should be completed.

1. Set the HD REC INPUT switch to HD position and the AUDIO OUT SELECT switch to NORM position on the pocket SW.
2. Set the AUDIO LEVEL VRs (CH1–NOR/HD, CH2–NOR/HD) to the centre detent (fixed) position and supply an audio signal to the NOR AUDIO INPUT (CH1,CH2).
3. Set the METER Switch to the NORM position.
4. Adjust VR4009 (CH1) and VR4010 (CH2) so that the needles of AUDIO LEVEL METER becomes "0 +/–0.5" position.
5. Set the METER Switch to the NORM position from HD position.
6. Supply an audio signal to HD AUDIO INPUTS (CH1,CH2).
7. Confirm that the needles indication of AUDIO LEVEL METER (CH1, CH2) are "0 +/–1.0" position.

2-7-5. NORMAL AUDIO PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4001 (CH1) TP4002 (CH2)	VR4001 (CH1) VR4004 (CH2)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ③	OSCILLO-SCOPE	400Hz AND 5kHz PORTIONS SHOULD BE SAME LEVEL (0±0.5dB)	

*Note:
Before attempting to adjust the Audio Frequency Response, set the VR4001 and VR4004 to the centre position.

1. The gains of 400Hz and 5KHz portions should be the same level (0+/–0.5dB)

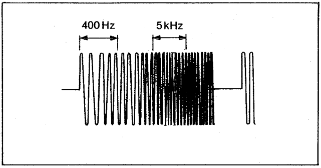


Figure E46

2-7-6. NORMAL AUDIO PLAYBACK GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
NORMAL TP4001 (CH1) TP4002 (CH2)	VR4002 (CH1) VR4005 (CH2)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ③	V.T.V.M.	300±15mVp-p (CH1) 310±15mVp-p (CH2)	

*Note:
Before this adjustment "Audio Playback Frequency Response Adjustment" should be completed.

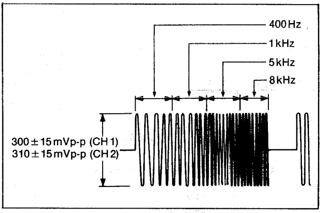


Figure E47

2-7-7. FULL ERASE CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4006	T4001 T4002	REC PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK	FREQUENCY COUNTER/ OSCILLO-SCOPE	70kHz±1kHz (T4001) 70Vp-p OR MORE (T4002)	

1. Adjust T4001 so that the frequency becomes 70KHz +/–1KHz.
2. Adjust T4002 so that the level becomes maximum and confirm that waveform of TP4006 is 70Vp–p or more.

2-7-8. NORMAL AUDIO ERASE CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4007 (CH1) TP4008 (CH2)	T4005 (CH1) T4006 (CH2)	EDIT REC PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK	OSCILLO-SCOPE	MAXIMUM	

1. Adjust T4005 (CH1) so that the level becomes maximum.
2. Adjust T4006 (CH2) so that the level becomes maximum.

3. Confirm that voltage of TP4007 and TP4008 is 20Vp-p or more.

2-7-9. NORMAL AUDIO BIAS CURRENT ADJUSTMENT

<table>
<tr><th>TP</th><th colspan="3">ADJ.</th><th>MODE</th><th colspan="2">INPUT</th></tr>
<tr><td rowspan="3">A/C HEAD</td><td></td><td>S-VHS</td><td>VHS</td><td rowspan="3">REC PLAY</td><td rowspan="3" colspan="2"></td></tr>
<tr><td>CH1</td><td>T4003</td><td>VR4011</td></tr>
<tr><td>CH2</td><td>T4004</td><td>VR4012</td></tr>
<tr><th>TAPE</th><th colspan="3">M. EQ.</th><th colspan="3">SPEC.</th></tr>
<tr><td rowspan="2">BLANK</td><td rowspan="2" colspan="3">V.T.V.M.</td><td>S-VHS</td><td colspan="2">VHS</td></tr>
<tr><td>2.4±0.1mVrms</td><td colspan="2">1.9±0.1mVrms</td></tr>
</table>

1. Connect a V.T.V.M. to the A/C Head as shown below.
2. Place the deck in the RECORD mode with an S-VHS Cassette Tape, adjust T4003 (CH1), T4004 (CH2) so that the V.T.V.M. level becomes 2.4+/-0.1mVrms.
3. Place the deck in RECORD mode with a VHS Cassette Tape, adjust T4011 (CH1), T4012 (CH2) so that the V.T.V.M. level becomes 1.9+/-0.1mVrms.

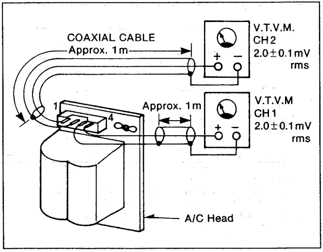


Figure E48

2-7-10. NORMAL AUDIO REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4003 (CH1) TP4004 (CH2) AUDIO OUT (NORM/HD, CH1/CH2)	VR4003 (CH1) VR4006 (CH2)	REC PLAY ↓ PLAY	1kHz, 0dBm AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK	V.T.V.M.		

1. Connect the VTVMs to the deck as shown in Figure E50. Note that only 1 channel will be adjusted at a time.
2. Supply an audio signal to NORMAL AUDIO CH1.
3. Place the deck in the REC mode with S-VHS mode.

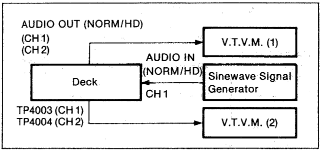


Figure E49

4. Adjust VR4003 (CH1) so that VTVM2 reads approximately 1.5Vp-p.
   Suppose that the indicated Value on VTVM1 is 0dBm.
5. Play back the recorded portion, and note the amount of difference in VTVM1 between REC mode and PLAY mode.
6. Place the deck in the REC mode again, and readjust VR4003 (CH1) slightly, and repeat step 5, nothing the new difference.
7. Repeat this ”Record/Set/Note ~ Playback/Note sequence until the difference between the VTVM1 record and playback readings is minimized (0+/-1dBm).
8. Repeat the above procedure again for channel 2, using the other set of test points and VRs.
9. Replace the S-VHS cassette with a VHS cassette tape and confirm that the level are within the range of -1dBm to +2dBm.

2-7-11. NORMAL AUDIO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4001 (CH1) TP4002 (CH2)	S4001 (CH1) S4002 (CH2) (JUMPER WIRE) C4109 (CH1) C4110 (CH2)	REC PLAY ↓ PLAY	1, 5, 8, 10kHz −20dBm
TAPE	**M. EQ.**	**SPEC.**	
BLANK	V.T.V.M.	0±3dB	

1. Record an audio test signal (1KHz, 5K, 8K, 10KHz, -20dBm) on VHS tape.
2. Read the level at TP4001 (CH1) and TP4002 (CH2) while playing back the 1KHz section. These are the reference level.
3. Play back the 5K, 8K and 10KHz sections.
4. Confirm that these higher frequency playback levels match that of the 1KHz level, to within +/-3dB.
5. If the 8KHz playback level is +2dB higher than the 1KHz level, remove jumpers S4001 (CH1) and/or S4002 (CH2).
6. Repeat step 4, playing back the VHS tape.
7. Repeat steps 2-4 in S-VHS mode.
8. If the 8KHz playback level is +2dB higher than the 1KHz level, remove C4109 (CH1) and/or C4110 (CH2).
9. Repeat stop 4 in S-VHS mode.

2-7-12. TIME CODE METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO (CH2) LEVEL METER	VR4007	REC PLAY	SINE WAVE 2kHz, 1Vp-p
TAPE	**M. EQ.**	**SPEC.**	
BLANK		0±0.5VU	

1. Set the AUDIO CH2 SELECT SW on the rear panel to TIME CODE.
2. Supply a 2KHz, 1Vp–p sine wave signal to the TIME CODE IN connecter.
3. Adjust VR4007 so that the AUDIO CH2 LEVEL METER reaches the "0+/–0.5" point.

2-8. HD AUDIO SECTION

Note:
Unless otherwise specified, set the following switches to the following positions.

SWITCH	POSITION
AUDIO MONITOR (HD/NORM)	HD
HD REC	ON
HD REC INPUT	HD
AUDIO OUT SELECT	HD
AUDIO INPUT LEVEL SELECT/ AUDIO OUT LEVEL SELECT	0dBs

2-8-1. HD CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4301 TP4302	VR4303 VR4308	STOP (E-E)	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	f_L=1.4MHz±10kHz (TP4301) f_R=1.8MHz±10kHz (TP4302)	

1. Connect to HD IN (CH1, CH2) to GND.
2. If signal level is too low to trigger the frequency counter, turn VR4306 (CH1) and VR4309 (CH2) clockwise.
Refer to "HD AUDIO REC CURRENT ADJUSTMENT" for the correct setting of these VRs, after this adjustment.

2-8-2. HD DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
D4318 (C) (CH1) D4320 (C) (CH2)	VR4302 (CH1) VR4307 (CH2)	STOP (E-E)	1kHz, 0dBm AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	330±10mVp-p	

1. Adjust VR4302 for 330+/–10mVp–p at the cathode of D4318.
2. Adjust VR4307 for 330+/–10mVp–p at the cathode of D4320.

2-8-3. HD AUDIO REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4802 (HOT) TP4801 (GND) (HD HEAD AMP)	VR4304 VR4305	REC PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK	OSCILLO-SCOPE	240mV±5mVp-p (CH1) 180mV±5mVp-p (CH2)	

1. Connect HD IN (CH1,CH2) to GND.
2. Turn VR4304 fully clockwise.
3. Adjust VR4305 so that the level becomes 180+/–5mV.
4. Adjust VR4304 so that the level becomes 240+/–5mV.

2-8-4. HD AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT (HD, CH1/CH2)	VR4301 (CH1) VR4306 (CH2)	PLAY	1kHz, 0dBm AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORD TAPE	V.T.V.M.	PLAYBACK LEVEL= E-E LEVEL±0.5dB	

1. Supply a 1KHz sine wave signal at 0dBm (0.775Vrms=2.19Vp–p) to the HD IN (CH1) (CH2) connecters, and make a short recording.
2. At the same time, measure the HD Audio levels at the HD AUDIO OUT (CH1/CH2) connecters.
3. Play back the just recorded portion.
4. Adjust VR4301 (CH1) and VR4306 (CH2) so that HD AUDIO OUT (CH1/CH2) levels match the E–E levels to within +/–0.5dB.

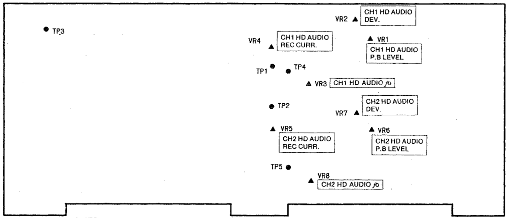
2-8-5. HD AUDIO MUTING LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4803 (HD HEAD AMP)	VR4801	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
BLANK	OSCILLO-SCOPE		

1. Turn VR4801 fully clockwise.
2. Connect the scope to TP4803.
3. Turn Tracking VR to its centre position.
4. Play back a blank tape in which there is no HD audio signals recorded.
5. Adjust VR4801 to the point right before HD lamp on the front panel turns on.

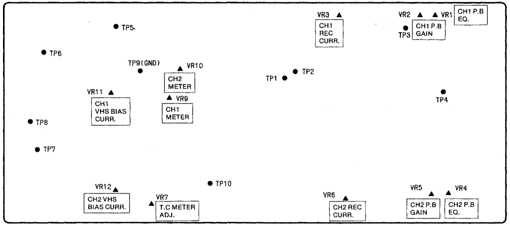
LOCATION OF TEST POINTS & CONTROLS

HD AUDIO C.B.A.


TP3
VR2
CH1 HD AUDIO DEV.
VR4
CH1 HD AUDIO REC CURR.
VR1
CH1 HD AUDIO P.B LEVEL
TP1
TP4
VR3
CH1 HD AUDIO ƒo
TP2
VR7
CH2 HD AUDIO DEV.
VR5
CH2 HD AUDIO REC CURR.
VR6
CH2 HD AUDIO P.B LEVEL
TP5
VR8
CH2 HD AUDIO ƒo

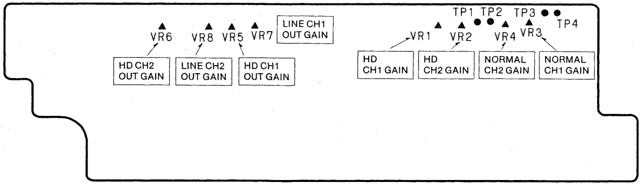
REF. No. 4300 SERIES (FOIL SIDE)

NORMAL AUDIO C.B.A.


TP5
TP6
VR3
CH1 REC CURR.
VR2
VR1
CH1 P.B EQ.
TP3
CH1 P.B GAIN
TP9(GND)
VR10
CH2 METER
TP1
TP2
VR11
CH1 VHS BIAS CURR.
VR9
CH1 METER
TP4
TP8
TP7
VR12
CH2 VHS BIAS CURR.
VR7
T.C METER ADJ.
TP10
VR6
CH2 REC CURR.
VR5
VR4
CH2 P.B GAIN
CH2 P.B EQ.

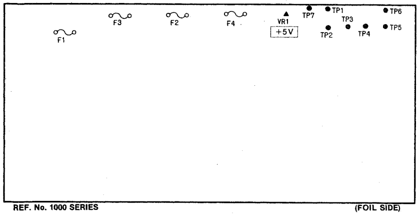
REF. No. 4000 SERIES (FOIL SIDE)

AUDIO JACK C.B.A.


VR6
VR8
VR5
VR7
LINE CH1 OUT GAIN
HD CH2 OUT GAIN
LINE CH2 OUT GAIN
HD CH1 OUT GAIN
TP1
TP2
TP3
TP4
VR1
VR2
VR4
VR3
HD CH1 GAIN
HD CH2 GAIN
NORMAL CH2 GAIN
NORMAL CH1 GAIN

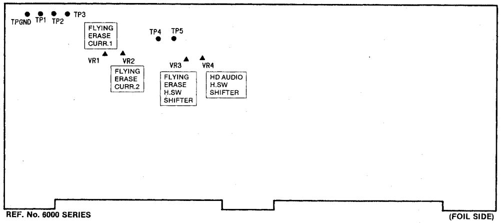
REF. NO. 4500 SERIES (COMPONENT SIDE)

POWER SUPPLY C.B.A.


F1
F3
F2
F4
VR1
+5V
TP7
TP1
TP6
TP3
TP2
TP4
TP5

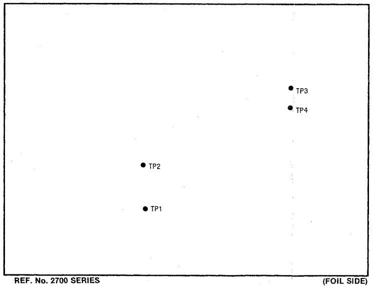
REF. No. 1000 SERIES (FOIL SIDE)

SYSTEM CONTROL C.B.A.


TPGND
TP1
TP2
TP3
FLYING ERASE CURR.1
TP4
TP5
VR1
VR2
FLYING ERASE CURR.2
VR3
VR4
FLYING ERASE H.SW SHIFTER
HD AUDIO H.SW SHIFTER

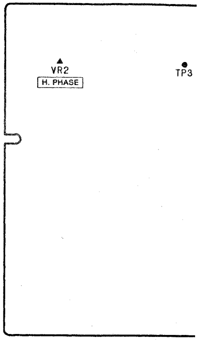
REF. No. 6000 SERIES (FOIL SIDE)

REEL SERVO C.B.A.


TP3
TP4
TP2
TP1

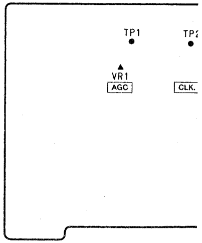
REF. No. 2700 SERIES (FOIL SIDE)

SERVO C.B.A.


VR2
H. PHASE
TP3

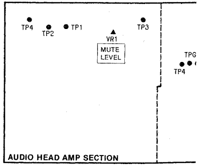
REF. NO. 2000 SERIES

Y/C SEPARATION C.B.A.

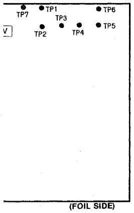

TP1
TP
VR1
AGC
CLK.

REF. NO. 32000 SERIES

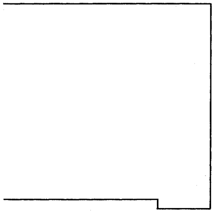
REC AMP & HEAD AMP C.B.A.


TP4
TP2
TP1
TP3
VR1
MUTE LEVEL
TPG
TP4
AUDIO HEAD AMP SECTION

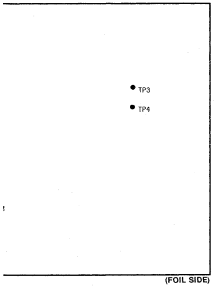
REF. No. 4800 SERIES


TP7
TP1
TP6
TP3
V
TP2
TP4
TP5

(FOIL SIDE)

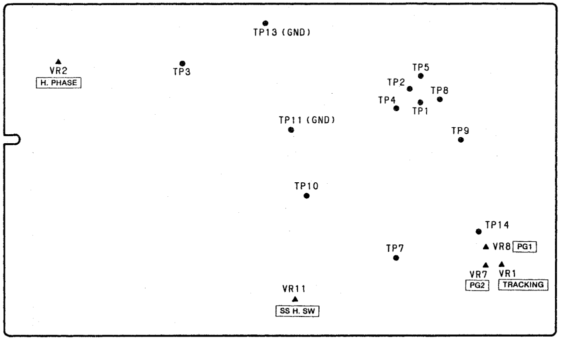


(FOIL SIDE)



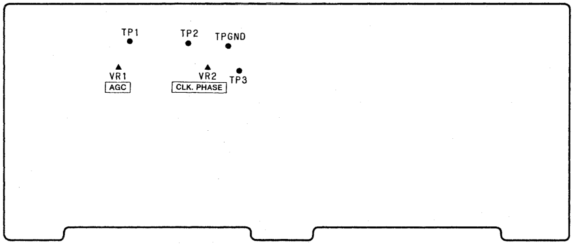
(FOIL SIDE)

SERVO C.B.A.


TP13 (GND)
VR2
H. PHASE
TP3
TP5
TP2
TP8
TP4
TP1
TP11 (GND)
TP9
TP10
TP14
VR8
PG1
TP7
VR7
VR1
PG2
TRACKING
VR11
SS H. SW

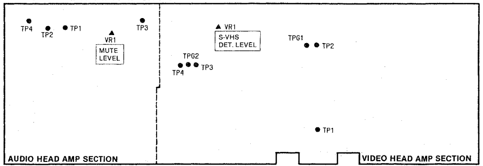
REF. NO. 2000 SERIES **(FOIL SIDE)**

Y/C SEPARATION C.B.A.


TP1
TP2
TPGND
VR1
AGC
VR2
CLK. PHASE
TP3

REF. NO. 32000 SERIES **(COMPONENT SIDE)**

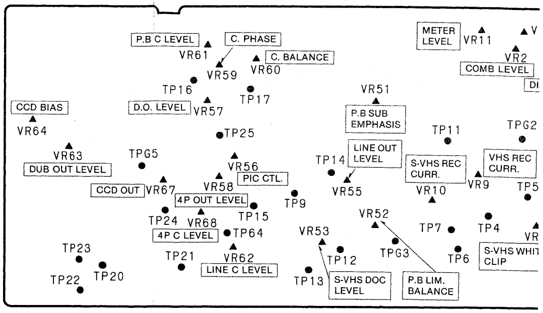
REC AMP & HEAD AMP C.B.A.


TP4
TP2
TP1
VR1
MUTE LEVEL
TP3
VR1
S-VHS DET. LEVEL
TPG1
TP2
TPG2
TP4
TP3
TP1
AUDIO HEAD AMP SECTION
VIDEO HEAD AMP SECTION

REF. No. 4800 SERIES

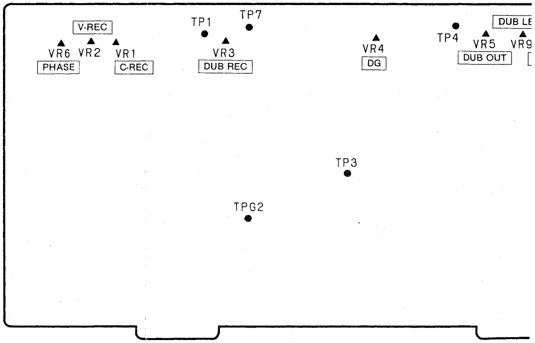
REF. No. 5000 SERIES
(FOIL SIDE)

VIDEO C.B.A.

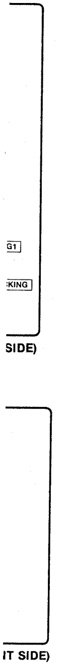

P.B C LEVEL
C. PHASE
VR61
VR59
C. BALANCE
VR60
METER LEVEL
VR11
VR2
COMB LEVEL
TP16
TP17
VR51
CCD BIAS
D.O. LEVEL
VR57
P.B SUB EMPHASIS
VR64
TP25
TP11
TPG2
VR63
DUB OUT LEVEL
TPG5
VR56
TP14
LINE OUT LEVEL
S-VHS REC CURR.
VHS REC CURR.
PIC CTL.
CCD OUT
VR67
VR58
VR55
VR10
VR9
TP5
4P OUT LEVEL
TP9
TP24
VR68
TP15
VR52
4P C LEVEL
TP64
VR53
TP7
TP4
TP23
TPG3
TP21
VR62
TP12
TP6
S-VHS WHIT CLIP
LINE C LEVEL
TP22
TP20
TP13
S-VHS DOC LEVEL
P.B LIM. BALANCE

REF. NO. 30000 SERIES

CHROMINANCE C.B.A.


V-REC
TP1
TP7
VR6
VR2
VR1
VR3
PHASE
C-REC
DUB REC
VR4
DG
TP4
DUB LE
VR5
VR9
DUB OUT
TP3
TPG2

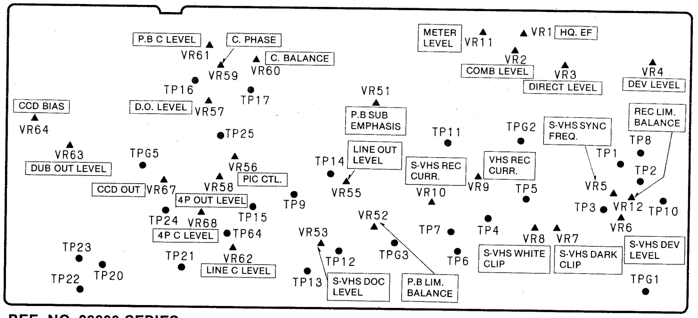
REF. NO. 8000 SERIES



SIDE)

IT SIDE)

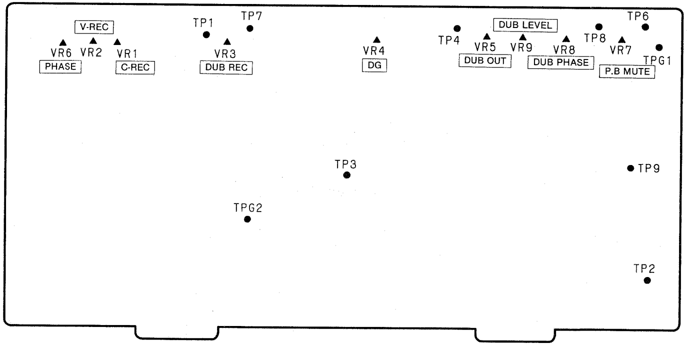
VIDEO C.B.A.


P.B C LEVEL
C. PHASE
VR61
C. BALANCE
VR59
VR60
TP16
TP17
VR51
METER LEVEL
VR11
VR1
HQ. EF
VR2
COMB LEVEL
VR3
DIRECT LEVEL
VR4
DEV LEVEL
CCD BIAS
D.O. LEVEL
VR57
VR64
P.B SUB EMPHASIS
TP25
TP11
TPG2
S-VHS SYNC FREQ.
REC LIM. BALANCE
TP8
VR63
DUB OUT LEVEL
TPG5
VR56
TP14
LINE OUT LEVEL
S-VHS REC CURR.
VHS REC CURR.
TP1
TP2
PIC CTL.
CCD OUT
VR67
VR58
4P OUT LEVEL
VR55
VR10
VR9
TP5
VR5
TP9
TP3
VR12
TP10
TP24
VR68
TP15
VR52
TP4
VR6
4P C LEVEL
TP64
VR53
TP7
VR8
VR7
S-VHS DEV LEVEL
TP23
TP21
VR62
TP12
TPG3
TP6
S-VHS WHITE CLIP
S-VHS DARK CLIP
TP22
TP20
LINE C LEVEL
TP13
S-VHS DOC LEVEL
P.B LIM. BALANCE
TPG1

REF. NO. 30000 SERIES

(FOIL SIDE)

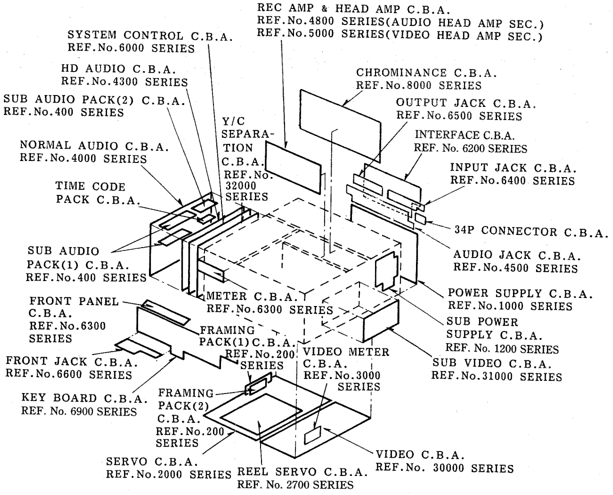
CHROMINANCE C.B.A.


V-REC
VR6
VR2
VR1
PHASE
C-REC
TP1
TP7
VR3
DUB REC
VR4
DG
TP4
DUB LEVEL
VR5
VR9
DUB OUT
VR8
DUB PHASE
TP8
TP6
VR7
TPG1
P.B MUTE
TP3
TP9
TPG2
TP2

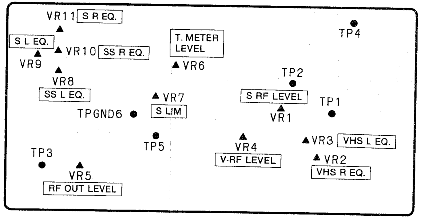
REF. NO. 8000 SERIES

(FOIL SIDE)

CIRCUIT BOARD LAYOUT


REC AMP & HEAD AMP C.B.A.
REF.No.4800 SERIES(AUDIO HEAD AMP SEC.)
REF.No.5000 SERIES(VIDEO HEAD AMP SEC.)
SYSTEM CONTROL C.B.A.
REF.No.6000 SERIES
HD AUDIO C.B.A.
REF.No.4300 SERIES
CHROMINANCE C.B.A.
REF.No.8000 SERIES
SUB AUDIO PACK(2) C.B.A.
REF.No.400 SERIES
OUTPUT JACK C.B.A.
REF.No.6500 SERIES
Y/C SEPARATION C.B.A.
REF.No. 32000 SERIES
INTERFACE C.B.A.
REF. No. 6200 SERIES
NORMAL AUDIO C.B.A.
REF.No.4000 SERIES
INPUT JACK C.B.A.
REF.No.6400 SERIES
TIME CODE PACK C.B.A.
34P CONNECTOR C.B.A.
SUB AUDIO PACK(1) C.B.A.
REF.No.400 SERIES
AUDIO JACK C.B.A.
REF.No.4500 SERIES
FRONT PANEL C.B.A.
REF.No.6300 SERIES
METER C.B.A.
REF.No.6300 SERIES
POWER SUPPLY C.B.A.
REF.No.1000 SERIES
FRAMING PACK(1)C.B.A.
REF.No.200 SERIES
SUB POWER SUPPLY C.B.A.
REF. No. 1200 SERIES
FRONT JACK C.B.A.
REF.No.6600 SERIES
VIDEO METER C.B.A.
REF.No.3000 SERIES
SUB VIDEO C.B.A.
REF.No.31000 SERIES
KEY BOARD C.B.A.
REF. No. 6900 SERIES
FRAMING PACK(2) C.B.A.
REF.No.200 SERIES
SERVO C.B.A.
REF.No.2000 SERIES
REEL SERVO C.B.A.
REF. No. 2700 SERIES
VIDEO C.B.A.
REF.No. 30000 SERIES

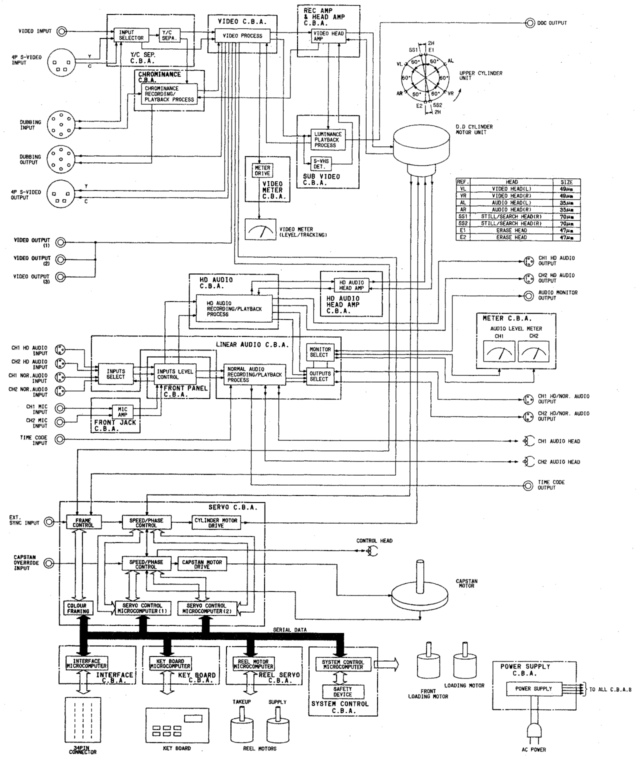
SUB VIDEO C.B.A.


VR11
S R EQ.
S L EQ.
VR10
SS R EQ.
VR9
T. METER LEVEL
VR6
TP4
VR8
SS L EQ.
VR7
S LIM
TPGND6
TP2
S RF LEVEL
VR1
TP1
VR3
VHS L EQ.
TP5
VR4
V-RF LEVEL
VR2
VHS R EQ.
TP3
VR5
RF OUT LEVEL

REF. NO. 31000 SERIES

(FOIL SIDE)

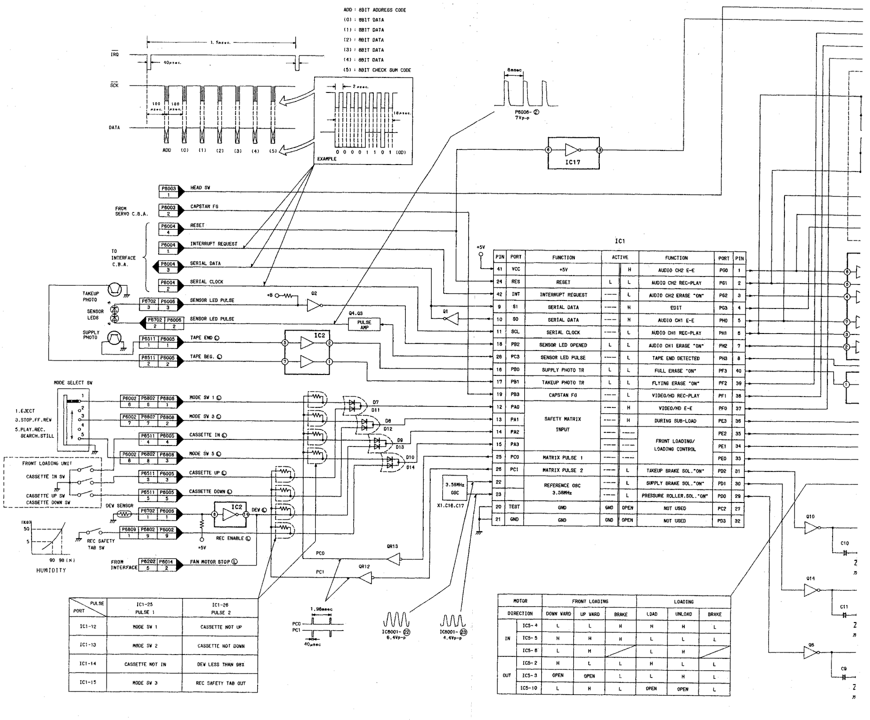
OVERALL BLOCK DIAGRAM


VIDEO INPUT
4P S-VIDEO INPUT
INPUT SELECTOR
Y/C SEPA.
Y/C SEP. C.B.A.
VIDEO C.B.A.
VIDEO PROCESS
REC AMP & HEAD AMP C.B.A.
VIDEO HEAD AMP
DOC OUTPUT
CHROMINANCE C.B.A.
CHROMINANCE RECORDING/PLAYBACK PROCESS
DUBBING INPUT
DUBBING OUTPUT
4P S-VIDEO OUTPUT
LUMINANCE PLAYBACK PROCESS
S-VHS DET.
SUB VIDEO C.B.A.
METER DRIVE
VIDEO METER C.B.A.
VIDEO METER (LEVEL/TRACKING)
UPPER CYLINDER UNIT
SS1 E1 2H VL AL AR VR E2 SS2 60°
D.D CYLINDER MOTOR UNIT
VIDEO OUTPUT (1)
VIDEO OUTPUT (2)
VIDEO OUTPUT (3)
HD AUDIO C.B.A.
HD AUDIO RECORDING/PLAYBACK PROCESS
HD AUDIO HEAD AMP
HD AUDIO HEAD AMP C.B.A.
CH1 HD AUDIO OUTPUT
CH2 HD AUDIO OUTPUT
AUDIO MONITOR OUTPUT
METER C.B.A.
AUDIO LEVEL METER
CH1 CH2
LINEAR AUDIO C.B.A.
CH1 HD AUDIO INPUT
CH2 HD AUDIO INPUT
CH1 NOR. AUDIO INPUT
CH2 NOR. AUDIO INPUT
INPUTS SELECT
INPUTS LEVEL CONTROL
FRONT PANEL C.B.A.
NORMAL AUDIO RECORDING/PLAYBACK PROCESS
MONITOR SELECT
OUTPUTS SELECT
CH1 HD/NOR. AUDIO OUTPUT
CH2 HD/NOR. AUDIO OUTPUT
CH1 MIC INPUT
CH2 MIC INPUT
MIC AMP
FRONT JACK C.B.A.
TIME CODE INPUT
CH1 AUDIO HEAD
CH2 AUDIO HEAD
TIME CODE OUTPUT
SERVO C.B.A.
EXT. SYNC INPUT
FRAME CONTROL
SPEED/PHASE CONTROL
CYLINDER MOTOR DRIVE
CONTROL HEAD
CAPSTAN OVERRIDE INPUT
CAPSTAN MOTOR DRIVE
CAPSTAN MOTOR
COLOUR FRAMING
SERVO CONTROL MICROCOMPUTER (1)
SERVO CONTROL MICROCOMPUTER (2)
SERIAL DATA
INTERFACE MICROCOMPUTER
INTERFACE C.B.A.
KEY BOARD MICROCOMPUTER
KEY BOARD C.B.A.
REEL MOTOR MICROCOMPUTER
REEL SERVO C.B.A.
SYSTEM CONTROL MICROCOMPUTER
SAFETY DEVICE
SYSTEM CONTROL C.B.A.
FRONT LOADING MOTOR
LOADING MOTOR
POWER SUPPLY C.B.A.
POWER SUPPLY
TO ALL C.B.A.S
34PIN CONNECTOR
KEY BOARD
TAKEUP
SUPPLY
REEL MOTORS
AC POWER

REF.	HEAD	SIZE
VL	VIDEO HEAD(L)	49μm
VR	VIDEO HEAD(R)	49μm
AL	AUDIO HEAD(L)	35μm
AR	AUDIO HEAD(R)	35μm
SS1	STILL/SEARCH HEAD(R)	70μm
SS2	STILL/SEARCH HEAD(R)	70μm
E1	ERASE HEAD	47μm
E2	ERASE HEAD	47μm

SYSTEM CONTROL (1) BLOCK DIAGRAM

ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE


IRQ
SCK
DATA
1.5msec.
40μsec.
100 μsec.
ADD (0) (1) (2) (3) (4) (5)
2μsec.
18μsec.
0 0 0 0 1 1 0 1 (OD)
EXAMPLE
8msec
P6006-② 7Vp-p
IC17
FROM SERVO C.B.A.
TO INTERFACE C.B.A.
HEAD SW
CAPSTAN FG
RESET
INTERRUPT REQUEST
SERIAL DATA
SERIAL CLOCK
TAKEUP PHOTO
SENSOR LEDS
SUPPLY PHOTO
SENSOR LED PULSE
TAPE END Ⓛ
TAPE BEG. Ⓛ
IC2
Q2
Q1
Q4,Q3
PULSE AMP
+5V
IC1
MODE SELECT SW
1.EJECT
3.STOP.FF.REW
5.PLAY.REC. SEARCH.STILL
MODE SW 1 Ⓛ
MODE SW 3 Ⓛ
CASSETTE IN Ⓛ
MODE SW 5 Ⓛ
FRONT LOADING UNIT
CASSETTE IN SW
CASSETTE UP SW
CASSETTE DOWN SW
CASSETTE UP Ⓛ
CASSETTE DOWN Ⓛ
DEW SENSOR
DEW Ⓛ
REC SAFETY TAB SW
REC ENABLE Ⓛ
(KΩ) 50 5
90 98 (%)
HUMIDITY
FROM INTERFACE
P6202 5
P6014 2
FAN MOTOR STOP Ⓛ
D7 D11 D8 D12 D9 D13 D10 D14
3.58MHz OSC
X1,C16,C17
PC0
PC1
QR13
QR12
1.96msec
40μsec
IC6001-㉒ 6.4Vp-p
IC6001-㉓ 4.4Vp-p
Q10 Q14 Q6
C10 C11 C9

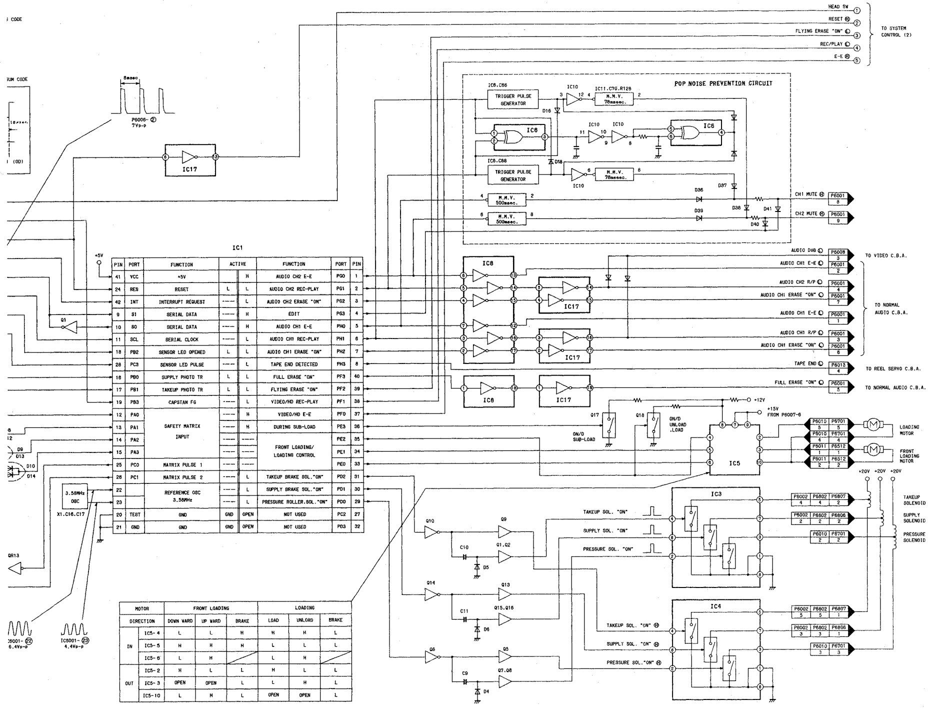
IC1

PIN	PORT	FUNCTION	ACTIVE	ACTIVE	FUNCTION	PORT	PIN
41	VCC	+5V		H	AUDIO CH2 E-E	PG0	1
24	RES	RESET	L	L	AUDIO CH2 REC-PLAY	PG1	2
42	INT	INTERRUPT REQUEST	----	L	AUDIO CH2 ERASE "ON"	PG2	3
9	S1	SERIAL DATA	----	H	EDIT	PG3	4
10	SO	SERIAL DATA	----	H	AUDIO CH1 E-E	PH0	5
11	SCL	SERIAL CLOCK	----	L	AUDIO CH1 REC-PLAY	PH1	6
18	PB2	SENSOR LED OPENED	L	L	AUDIO CH1 ERASE "ON"	PH2	7
28	PC3	SENSOR LED PULSE	----	L	TAPE END DETECTED	PH3	8
16	PB0	SUPPLY PHOTO TR	L	L	FULL ERASE "ON"	PF3	40
17	PB1	TAKEUP PHOTO TR	L	L	FLYING ERASE "ON"	PF2	39
19	PB3	CAPSTAN FG	----	L	VIDEO/HD REC-PLAY	PF1	38
12	PA0	SAFETY MATRIX INPUT	----	H	VIDEO/HD E-E	PF0	37
13	PA1		----	H	DURING SUB-LOAD	PE3	36
14	PA2		----	----	FRONT LOADING/ LOADING CONTROL	PE2	35
15	PA3		----	----		PE1	34
25	PC0	MATRIX PULSE 1	----	----		PE0	33
26	PC1	MATRIX PULSE 2	----	L	TAKEUP BRAKE SOL."ON"	PD2	31
22		REFERENCE OSC 3.58MHz	----	L	SUPPLY BRAKE SOL."ON"	PD1	30
23			----	L	PRESSURE ROLLER.SOL."ON"	PD0	29
20	TEST	GND	GND	OPEN	NOT USED	PC2	27
21	GND	GND	GND	OPEN	NOT USED	PD3	32

PULSE / PORT	IC1-25 PULSE 1	IC1-26 PULSE 2
IC1-12	MODE SW 1	CASSETTE NOT UP
IC1-13	MODE SW 2	CASSETTE NOT DOWN
IC1-14	CASSETTE NOT IN	DEW LESS THAN 98%
IC1-15	MODE SW 3	REC SAFETY TAB OUT

MOTOR		FRONT LOADING			LOADING		
DIRECTION		DOWN WARD	UP WARD	BRAKE	LOAD	UNLOAD	BRAKE
IN	IC5-4	L	L	H	H	H	L
	IC5-5	H	H	H	L	L	L
	IC5-6	L	H		L	H	
OUT	IC5-2	H	L	L	H	L	L
	IC5-3	OPEN	OPEN	L	L	H	L
	IC5-10	L	H	L	OPEN	OPEN	L

AM

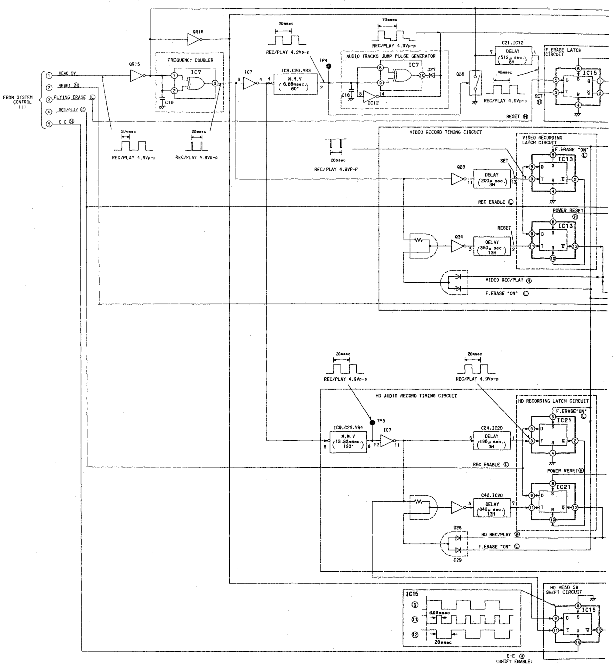

CODE
SUM CODE
18μsec.
(OD)
8msec
P6006-②
7Vp-p
IC17
HEAD SW ①
RESET Ⓗ ②
FLYING ERASE "ON" Ⓛ ③
REC/PLAY Ⓛ ④
E-E Ⓗ ⑤
TO SYSTEM CONTROL (2)
POP NOISE PREVENTION CIRCUIT
IC6.C66
TRIGGER PULSE GENERATOR
IC10
IC11.C70.R128
M.M.V. 78msec.
D16
IC6
IC10
IC6
D18
IC6.C68
TRIGGER PULSE GENERATOR
M.M.V. 78msec.
IC10
D37
M.M.V. 500msec.
D36
D38
D41
M.M.V. 500msec.
D39
D40
CH1 MUTE Ⓗ
P6001 8
CH2 MUTE Ⓗ
P6001 9
IC1
+5V
Q1
D9
D13
D10
D14
3.58MHz OSC
X1.C16.C17
QR13
IC6001-㉒
6.4Vp-p
IC6001-㉓
4.4Vp-p
IC8
IC17
IC8
IC17
IC8
IC17
AUDIO DUB Ⓛ
P6008 3
TO VIDEO C.B.A.
AUDIO CH1 E-E Ⓛ
P6001 2
AUDIO CH2 R/P Ⓛ
P6001 4
AUDIO CH1 ERASE "ON" Ⓛ
P6001 7
AUDIO CH1 E-E Ⓛ
P6001 1
AUDIO CH1 R/P Ⓛ
P6001 3
AUDIO CH1 ERASE "ON" Ⓛ
P6001 6
TO NORMAL AUDIO C.B.A.
TAPE END Ⓛ
P6013 4
TO REEL SERVO C.B.A.
FULL ERASE "ON" Ⓛ
P6001 5
TO NORMAL AUDIO C.B.A.
+12V
+15V FROM P6007-6
Q17
Q18
ON/D SUB-LOAD
ON/D UNLOAD .LOAD
IC5
P6010 P6701 5 5
P6010 P6701 4 4
P6011 P6512 1 1
P6011 P6512 2 2
LOADING MOTOR
FRONT LOADING MOTOR
+20V +20V +20V
IC3
TAKEUP SOL. "ON"
SUPPLY SOL. "ON"
PRESSURE SOL. "ON"
P6002 P6802 P6807 4 4 2
P6002 P6802 P6806 2 2 2
P6010 P6701 2 2
TAKEUP SOLENOID
SUPPLY SOLENOID
PRESSURE SOLENOID
Q10
Q9
C10
Q1.Q2
D5
Q14
Q13
C11
Q15.Q16
D6
Q6
Q5
C9
Q7.Q8
D4
IC4
TAKEUP SOL. "ON" Ⓗ
SUPPLY SOL. "ON" Ⓗ
PRESSURE SOL."ON" Ⓗ
P6002 P6802 P6807 5 5 1
P6002 P6802 P6806 3 3 1
P6010 P6701 3 3

IC1

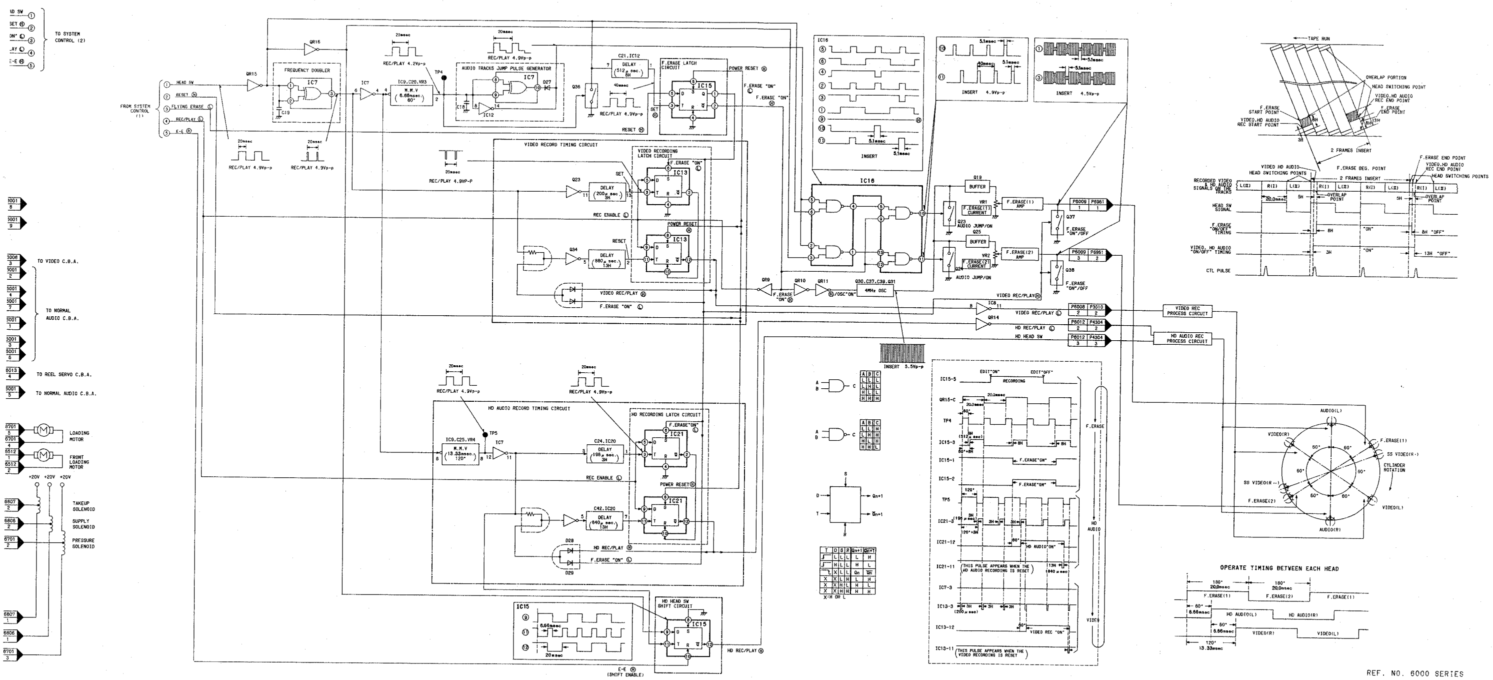
PIN	PORT	FUNCTION	ACTIVE		FUNCTION	PORT	PIN
41	VCC	+5V		H	AUDIO CH2 E-E	PG0	1
24	RES	RESET	L	L	AUDIO CH2 REC-PLAY	PG1	2
42	INT	INTERRUPT REQUEST	---	L	AUDIO CH2 ERASE "ON"	PG2	3
9	S1	SERIAL DATA	---	H	EDIT	PG3	4
10	S0	SERIAL DATA	---	H	AUDIO CH1 E-E	PH0	5
11	SCL	SERIAL CLOCK	---	L	AUDIO CH1 REC-PLAY	PH1	6
18	PB2	SENSOR LED OPENED	L	L	AUDIO CH1 ERASE "ON"	PH2	7
28	PC3	SENSOR LED PULSE	---	L	TAPE END DETECTED	PH3	8
16	PB0	SUPPLY PHOTO TR	L	L	FULL ERASE "ON"	PF3	40
17	PB1	TAKEUP PHOTO TR	L	L	FLYING ERASE "ON"	PF2	39
19	PB3	CAPSTAN FG	---	L	VIDEO/HD REC-PLAY	PF1	38
12	PA0	SAFETY MATRIX INPUT	---	H	VIDEO/HD E-E	PF0	37
13	PA1		---	H	DURING SUB-LOAD	PE3	36
14	PA2		---	---	FRONT LOADING/ LOADING CONTROL	PE2	35
15	PA3		---	---		PE1	34
25	PC0	MATRIX PULSE 1	---	---		PE0	33
26	PC1	MATRIX PULSE 2	---	L	TAKEUP BRAKE SOL."ON"	PD2	31
22		REFERENCE OSC 3.58MHz	---	L	SUPPLY BRAKE SOL."ON"	PD1	30
23			---	L	PRESSURE ROLLER.SOL."ON"	PD0	29
20	TEST	GND	GND	OPEN	NOT USED	PC2	27
21	GND	GND	GND	OPEN	NOT USED	PD3	32

MOTOR		FRONT LOADING			LOADING		
DIRECTION		DOWN WARD	UP WARD	BRAKE	LOAD	UNLOAD	BRAKE
IN	IC5- 4	L	L	H	H	H	L
	IC5- 5	H	H	H	L	L	L
	IC5- 6	L	H		L	H	
OUT	IC5- 2	H	L	L	H	L	L
	IC5- 3	OPEN	OPEN	L	L	H	L
	IC5-10	L	H	L	OPEN	OPEN	L

SYSTEM CONTROL (2) BLOCK DIAGRAM

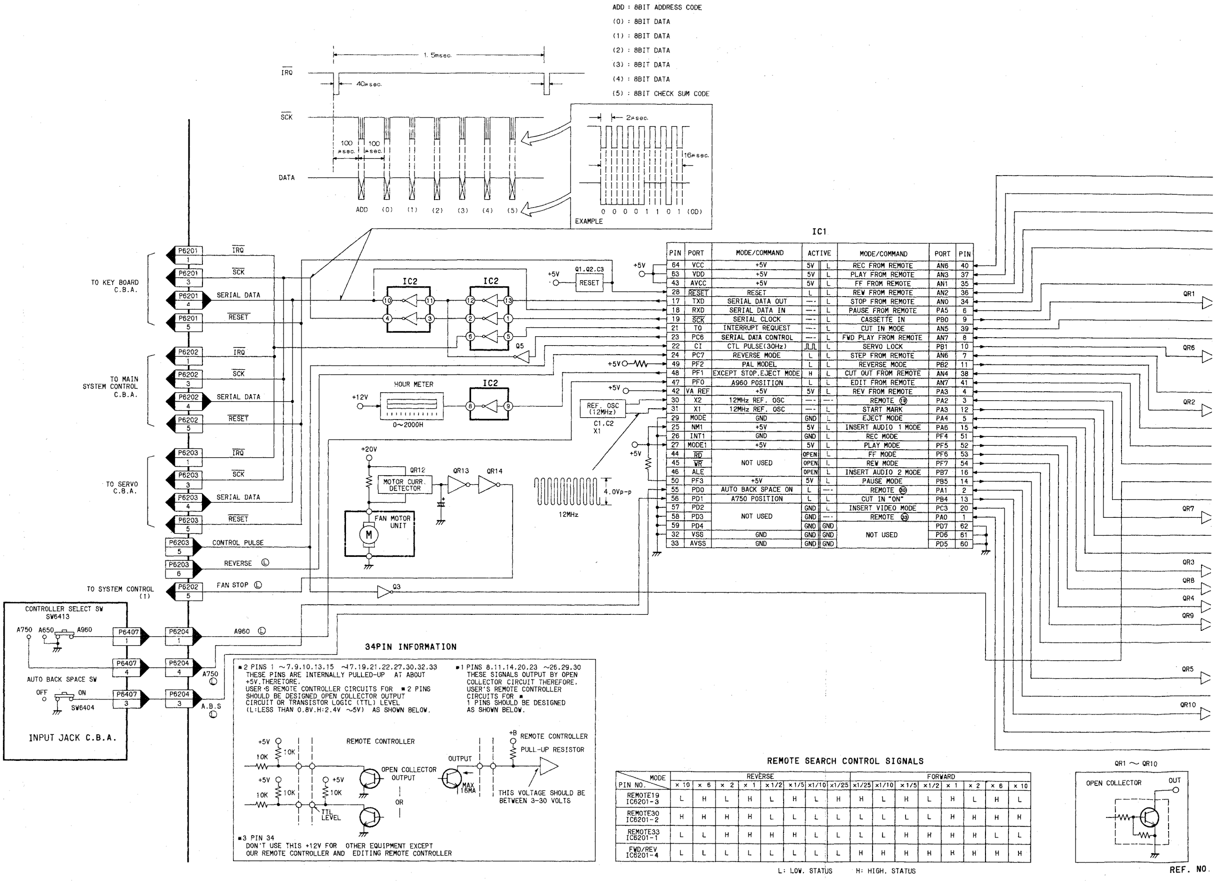

FROM SYSTEM CONTROL (1)
① HEAD SW
② RESET Ⓗ
③ FLYING ERASE Ⓛ
④ REC/PLAY Ⓛ
⑤ E-E Ⓗ
QR15
QR16
FREQUENCY DOUBLER
IC7
C19
20msec
REC/PLAY 4.9Vp-p
20msec
REC/PLAY 4.9Vp-p
IC7
20msec
REC/PLAY 4.2Vp-p
IC9.C20.VR3
M.M.V (6.66msec. 60°)
TP4
20msec
REC/PLAY 4.9Vp-p
AUDIO TRACKS JUMP PULSE GENERATOR
IC7
C18
IC12
D27
Q36
C21.IC12
DELAY (512μ sec. 8H)
40msec
REC/PLAY 4.9Vp-p
F.ERASE LATCH CIRCUIT
IC15
SET Ⓗ
RESET Ⓗ
20msec
REC/PLAY 4.9VP-P
VIDEO RECORD TIMING CIRCUIT
VIDEO RECORDING LATCH CIRCUIT
F.ERASE "ON" Ⓛ
SET
Q23
DELAY (200μ sec. 3H)
IC13
REC ENABLE Ⓛ
POWER RESET Ⓗ
RESET
Q34
DELAY (880μ sec. 13H)
IC13
VIDEO REC/PLAY Ⓗ
F.ERASE "ON" Ⓛ
20msec
REC/PLAY 4.9Vp-p
20msec
REC/PLAY 4.9Vp-p
HD AUDIO RECORD TIMING CIRCUIT
TP5
IC9.C25.VR4
M.M.V (13.33msec. 120°)
IC7
C24.IC20
DELAY (198μ sec. 3H)
HD RECORDING LATCH CIRCUIT
F.ERASE"ON" Ⓛ
IC21
REC ENABLE Ⓛ
POWER RESET Ⓗ
C42.IC20
DELAY (840μ sec. 13H)
IC21
D28
HD REC/PLAY Ⓗ
F.ERASE "ON" Ⓛ
D29
IC15
⑨
⑪
6.66msec
⑫
20msec
HD HEAD SW SHIFT CIRCUIT
IC15
E-E Ⓗ (SHIFT ENABLE)

SYSTEM CONTROL (2) BLOCK DIAGRAM


TO SYSTEM CONTROL (2)
FROM SYSTEM CONTROL (1)
HEAD SW
RESET Ⓗ
FLYING ERASE Ⓛ
REC/PLAY Ⓛ
E-E Ⓗ
QR15
QR16
FREQUENCY DOUBLER
IC7
C19
REC/PLAY 4.9Vp-p
20msec
REC/PLAY 4.2Vp-p
TP4
IC9,C20,VR3
M.M.V (6.66msec 60°)
AUDIO TRACKS JUMP PULSE GENERATOR
IC12
D27
C18
Q36
C21,IC12
DELAY (512μ sec 8H)
40msec
F.ERASE LATCH CIRCUIT
IC15
POWER RESET Ⓗ
F.ERASE "ON" Ⓛ
F.ERASE "ON" Ⓗ
RESET Ⓗ
SET Ⓗ
VIDEO RECORD TIMING CIRCUIT
VIDEO RECORDING LATCH CIRCUIT
IC13
Q23
DELAY (200μ sec 3H)
REC ENABLE Ⓛ
POWER RESET Ⓗ
Q34
DELAY (880μ sec 13H)
VIDEO REC/PLAY Ⓗ
F.ERASE "ON" Ⓛ
TO VIDEO C.B.A.
TO NORMAL AUDIO C.B.A.
TO REEL SERVO C.B.A.
LOADING MOTOR
FRONT LOADING MOTOR
TAKEUP SOLENOID
SUPPLY SOLENOID
PRESSURE SOLENOID
+20V
IC16
INSERT
5.1msec
INSERT 4.9Vp-p
INSERT 4.5Vp-p
Q19
BUFFER
VR1
F.ERASE(1) CURRENT
F.ERASE(1) AMP
Q23 AUDIO JUMP/ON
Q25
VR2
F.ERASE(2) CURRENT
F.ERASE(2) AMP
Q24 AUDIO JUMP/ON
P6009 P6951
Q37
F.ERASE "ON"/OFF
Q38
QR9
QR10
QR11
F.ERASE "ON" Ⓗ
Ⓗ/OSC"ON"
Q30,C37,C39,Q31
4MHz OSC
INSERT 5.5Vp-p
VIDEO REC/PLAY Ⓗ
IC8
QR14
VIDEO REC/PLAY Ⓛ
HD REC/PLAY Ⓛ
HD HEAD SW
P6008 P3010
P6012 P4304
VIDEO REC PROCESS CIRCUIT
HD AUDIO REC PROCESS CIRCUIT
HD AUDIO RECORD TIMING CIRCUIT
HD RECORDING LATCH CIRCUIT
IC9,C25,VR4
M.M.V (13.33msec 120°)
TP5
IC21
C24,IC20
DELAY (198μ sec 3H)
C42,IC20
DELAY (840μ sec 13H)
D28
D29
HD REC/PLAY Ⓗ
F.ERASE "ON" Ⓛ
HD HEAD SW SHIFT CIRCUIT
6.66msec
20msec
E-E Ⓗ (SHIFT ENABLE)
HD REC/PLAY Ⓗ
X:H OR L
EDIT"ON"
EDIT"OFF"
RECORDING
IC15-5
QR15-C
IC15-3
IC15-1
IC15-2
IC21-3
IC21-12
IC21-11
THIS PULSE APPEARS WHEN THE HD AUDIO RECORDING IS RESET
IC7-3
IC13-3
IC13-12
IC13-11
THIS PULSE APPEARS WHEN THE VIDEO RECORDING IS RESET
F.ERASE "ON"
HD AUDIO "ON"
VIDEO REC "ON"
HD AUDIO
VIDEO
TAPE RUN
OVERLAP PORTION
HEAD SWITCHING POINT
VIDEO,HD AUDIO REC END POINT
F.ERASE END POINT
F.ERASE START POINT
VIDEO,HD AUDIO REC START POINT
2 FRAMES INSERT
VIDEO HD AUDIO HEAD SWITCHING POINTS
F.ERASE BEG. POINT
RECORDED VIDEO & HD AUDIO SIGNALS ON THE TRACKS
HEAD SW SIGNAL
F.ERASE "ON/OFF" TIMING
VIDEO, HD AUDIO "ON/OFF" TIMING
CTL PULSE
AUDIO(L)
VIDEO(R)
F.ERASE(1)
SS VIDEO(R-)
CYLINDER ROTATION
SS VIDEO(R+)
F.ERASE(2)
VIDEO(L)
AUDIO(R)
OPERATE TIMING BETWEEN EACH HEAD
180° 20.0msec
F.ERASE(1)
F.ERASE(2)
60° 6.66msec
HD AUDIO(L)
HD AUDIO(R)
VIDEO(R)
VIDEO(L)
120° 13.33msec

REF. NO. 6000 SERIES

INTERFACE BLOCK DIAGRAM


ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
1.5msec.
IRQ
40μsec.
SCK
100 μsec.
100 μsec.
DATA
ADD (0) (1) (2) (3) (4) (5)
2μsec.
16μsec.
0 0 0 0 1 1 0 1 (0D)
EXAMPLE
TO KEY BOARD C.B.A.
P6201 1
P6201 3
P6201 4
P6201 5
IRQ
SCK
SERIAL DATA
RESET
TO MAIN SYSTEM CONTROL C.B.A.
P6202 1
P6202 3
P6202 4
P6202 5
TO SERVO C.B.A.
P6203 1
P6203 3
P6203 4
P6203 5
P6203 5
CONTROL PULSE
P6203 6
REVERSE Ⓛ
TO SYSTEM CONTROL (1)
P6202 5
FAN STOP Ⓛ
Q3
CONTROLLER SELECT SW SW6413
A750 A650 A960
P6407 1
P6204 1
A960 Ⓛ
P6407 4
P6204 4
A750 Ⓛ
AUTO BACK SPACE SW
OFF ON
SW6404
P6407 3
P6204 3
A.B.S Ⓛ
INPUT JACK C.B.A.
IC2
IC2
Q5
+5V
Q1.Q2.C3
RESET
+5V
HOUR METER
+12V
0~2000H
IC2
+5V
REF. OSC (12MHz)
C1.C2 X1
+20V
QR12
MOTOR CURR. DETECTOR
QR13
QR14
FAN MOTOR UNIT
M
12MHz
4.0Vp-p
+5V
IC1
QR1
QR6
QR2
QR7
QR3
QR8
QR4
QR9
QR5
QR10
QR1 ~ QR10
OPEN COLLECTOR
OUT
REF. NO.

IC1

PIN	PORT	MODE/COMMAND	ACTIVE		MODE/COMMAND	PORT	PIN
64	VCC	+5V	5V	L	REC FROM REMOTE	AN6	40
63	VDD	+5V	5V	L	PLAY FROM REMOTE	AN3	37
43	AVCC	+5V	5V	L	FF FROM REMOTE	AN1	35
28	RESET	RESET	L	L	REW FROM REMOTE	AN2	36
17	TXD	SERIAL DATA OUT	---	L	STOP FROM REMOTE	AN0	34
18	RXD	SERIAL DATA IN	---	L	PAUSE FROM REMOTE	PA5	6
19	SCK	SERIAL CLOCK	---	L	CASSETTE IN	PB0	9
21	T0	INTERRUPT REQUEST	---	L	CUT IN MODE	AN5	39
23	PC6	SERIAL DATA CONTROL	---	L	FWD PLAY FROM REMOTE	AN7	8
22	CI	CTL PULSE(30Hz)	⎍⎍	L	SERVO LOCK	PB1	10
24	PC7	REVERSE MODE	L	L	STEP FROM REMOTE	AN6	7
49	PF2	PAL MODEL	L	L	REVERSE MODE	PB2	11
48	PF1	EXCEPT STOP.EJECT MODE	H	L	CUT OUT FROM REMOTE	AN4	38
47	PF0	A960 POSITION	L	L	EDIT FROM REMOTE	AN7	41
42	VA REF	+5V	5V	L	REV FROM REMOTE	PA3	4
30	X2	12MHz REF. OSC	---	---	REMOTE ⑲	PA2	3
31	X1	12MHz REF. OSC	---	L	START MARK	PA3	12
29	MODE	GND	GND	L	EJECT MODE	PA4	5
25	NM1	+5V	5V	L	INSERT AUDIO 1 MODE	PA6	15
26	INT1	GND	GND	L	REC MODE	PF4	51
27	MODE1	+5V	5V	L	PLAY MODE	PF5	52
44	RD	NOT USED	OPEN	L	FF MODE	PF6	53
45	WR		OPEN	L	REW MODE	PF7	54
46	ALE		OPEN	L	INSERT AUDIO 2 MODE	PB7	16
50	PF3	+5V	5V	L	PAUSE MODE	PB5	14
55	PD0	AUTO BACK SPACE ON	L	---	REMOTE ㉚	PA1	2
56	PD1	A750 POSITION	L	L	CUT IN "ON"	PB4	13
57	PD2	NOT USED	GND	L	INSERT VIDEO MODE	PC3	20
58	PD3		GND	---	REMOTE ㉝	PA0	1
59	PD4		GND	GND	NOT USED	PD7	62
32	VSS	GND	GND	GND		PD6	61
33	AVSS	GND	GND	GND		PD5	60

34PIN INFORMATION

※2 PINS 1 ~7.9.10.13.15 ~17.19.21.22.27.30.32.33
THESE PINS ARE INTERNALLY PULLED-UP AT ABOUT +5V.THERETORE.
USER·S REMOTE CONTROLLER CIRCUITS FOR ※2 PINS SHOULD BE DESIGNED OPEN COLLECTOR OUTPUT CIRCUIT OR TRANSISTOR LOGIC (TTL) LEVEL (L:LESS THAN 0.8V.H:2.4V ~5V) AS SHOWN BELOW.

※1 PINS 8.11.14.20.23 ~26.29.30
THESE SIGNALS OUTPUT BY OPEN COLLECTOR CIRCUIT THEREFORE. USER'S REMOTE CONTROLLER CIRCUITS FOR ※1 PINS SHOULD BE DESIGNED AS SHOWN BELOW.

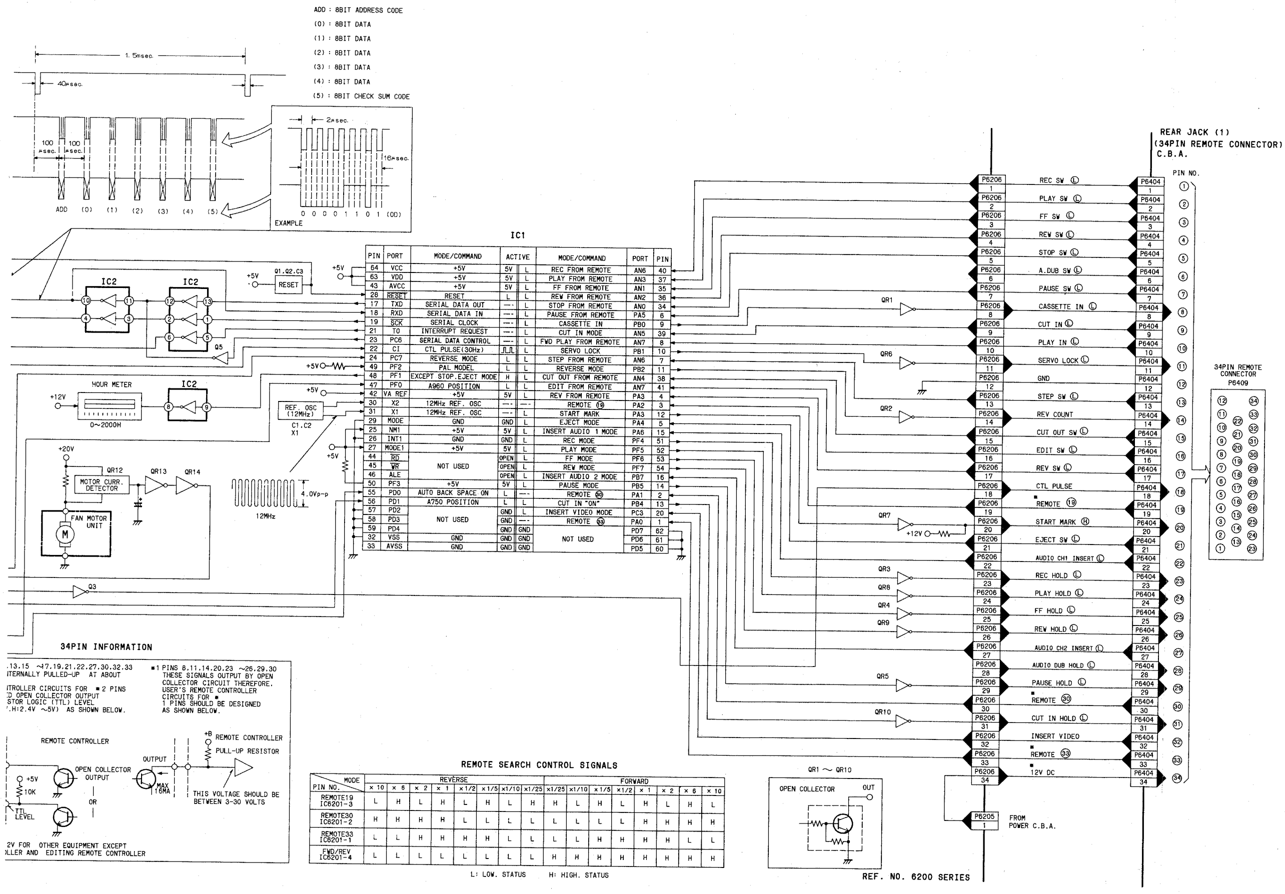
+5V
10K
10K
REMOTE CONTROLLER
OPEN COLLECTOR OUTPUT
OR
+5V
TTL LEVEL
OUTPUT
MAX 16MA
+B
REMOTE CONTROLLER PULL-UP RESISTOR
THIS VOLTAGE SHOULD BE BETWEEN 3-30 VOLTS

※3 PIN 34
DON'T USE THIS +12V FOR OTHER EQUIPMENT EXCEPT OUR REMOTE CONTROLLER AND EDITING REMOTE CONTROLLER

REMOTE SEARCH CONTROL SIGNALS

MODE / PIN NO.	REVERSE								FORWARD							
	× 10	× 6	× 2	× 1	×1/2	×1/5	×1/10	×1/25	×1/25	×1/10	×1/5	×1/2	× 1	× 2	× 6	× 10
REMOTE19 IC6201-3	L	H	L	H	L	H	L	H	H	L	H	L	H	L	H	L
REMOTE30 IC6201-2	H	H	H	H	L	L	L	L	L	L	L	L	H	H	H	H
REMOTE33 IC6201-1	L	L	H	H	H	H	L	L	L	L	H	H	H	H	L	L
FWD/REV IC6201-4	L	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H

L: LOW. STATUS H: HIGH. STATUS


ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
1.5msec.
40μsec.
100 μsec.
100 μsec.
ADD (0) (1) (2) (3) (4) (5)
2μsec.
16μsec.
0 0 0 0 1 1 0 1 (0D)
EXAMPLE
IC1
IC2
IC2
+5V
Q1.Q2.C3
RESET
Q5
+5V
HOUR METER
0~2000H
+12V
IC2
+5V
REF. OSC (12MHz)
C1.C2
X1
+20V
QR12
QR13
QR14
MOTOR CURR. DETECTOR
FAN MOTOR UNIT
M
+5V
12MHz
4.0Vp-p
Q3
QR1
QR6
QR2
QR7
+12V
QR3
QR8
QR4
QR9
QR5
QR10
REAR JACK (1)
(34PIN REMOTE CONNECTOR)
C.B.A.
PIN NO.
34PIN REMOTE CONNECTOR
P6409
P6205 1
FROM POWER C.B.A.
QR1 ~ QR10
OPEN COLLECTOR
OUT
REMOTE CONTROLLER
+5V
10K
TTL LEVEL
OPEN COLLECTOR OUTPUT
OR
OUTPUT
MAX 16MA
+B
REMOTE CONTROLLER PULL-UP RESISTOR
THIS VOLTAGE SHOULD BE BETWEEN 3-30 VOLTS

PIN	PORT	MODE/COMMAND	ACTIVE		MODE/COMMAND	PORT	PIN
64	VCC	+5V	5V	L	REC FROM REMOTE	AN6	40
63	VDD	+5V	5V	L	PLAY FROM REMOTE	AN3	37
43	AVCC	+5V	5V	L	FF FROM REMOTE	AN1	35
28	RESET	RESET	L	L	REW FROM REMOTE	AN2	36
17	TXD	SERIAL DATA OUT	---	L	STOP FROM REMOTE	AN0	34
18	RXD	SERIAL DATA IN	---	L	PAUSE FROM REMOTE	PA5	6
19	SCK	SERIAL CLOCK	---	L	CASSETTE IN	PB0	9
21	T0	INTERRUPT REQUEST	---	L	CUT IN MODE	AN5	39
23	PC6	SERIAL DATA CONTROL	---	L	FWD PLAY FROM REMOTE	AN7	8
22	CI	CTL PULSE(30Hz)	⎍⎍	L	SERVO LOCK	PB1	10
24	PC7	REVERSE MODE	L	L	STEP FROM REMOTE	AN6	7
49	PF2	PAL MODEL	L	L	REVERSE MODE	PB2	11
48	PF1	EXCEPT STOP.EJECT MODE	H	L	CUT OUT FROM REMOTE	AN4	38
47	PF0	A960 POSITION	L	L	EDIT FROM REMOTE	AN7	41
42	VA REF	+5V	5V	L	REV FROM REMOTE	PA3	4
30	X2	12MHz REF. OSC	---	---	REMOTE ⑲	PA2	3
31	X1	12MHz REF. OSC	---	L	START MARK	PA3	12
29	MODE	GND	GND	L	EJECT MODE	PA4	5
25	NM1	+5V	5V	L	INSERT AUDIO 1 MODE	PA6	15
26	INT1	GND	GND	L	REC MODE	PF4	51
27	MODE1	+5V	5V	L	PLAY MODE	PF5	52
44	RD	NOT USED	OPEN	L	FF MODE	PF6	53
45	WR		OPEN	L	REW MODE	PF7	54
46	ALE		OPEN	L	INSERT AUDIO 2 MODE	PB7	16
50	PF3	+5V	5V	L	PAUSE MODE	PB5	14
55	PD0	AUTO BACK SPACE ON	L	---	REMOTE ㉚	PA1	2
56	PD1	A750 POSITION	L	L	CUT IN "ON"	PB4	13
57	PD2	NOT USED	GND	L	INSERT VIDEO MODE	PC3	20
58	PD3		GND	---	REMOTE ㉝	PA0	1
59	PD4		GND	GND	NOT USED	PD7	62
32	VSS	GND	GND	GND		PD6	61
33	AVSS	GND	GND	GND		PD5	60

P6206 1	REC SW Ⓛ	P6404 1	①
P6206 2	PLAY SW Ⓛ	P6404 2	②
P6206 3	FF SW Ⓛ	P6404 3	③
P6206 4	REW SW Ⓛ	P6404 4	④
P6206 5	STOP SW Ⓛ	P6404 5	⑤
P6206 6	A.DUB SW Ⓛ	P6404 6	⑥
P6206 7	PAUSE SW Ⓛ	P6404 7	⑦
P6206 8	CASSETTE IN Ⓛ	P6404 8	⑧
P6206 9	CUT IN Ⓛ	P6404 9	⑨
P6206 10	PLAY IN Ⓛ	P6404 10	⑩
P6206 11	SERVO LOCK Ⓛ	P6404 11	⑪
P6206 12	GND	P6404 12	⑫
P6206 13	STEP SW Ⓛ	P6404 13	⑬
P6206 14	REV COUNT	P6404 14	⑭
P6206 15	CUT OUT SW Ⓛ	P6404 15	⑮
P6206 16	EDIT SW Ⓛ	P6404 16	⑯
P6206 17	REV SW Ⓛ	P6404 17	⑰
P6206 18	CTL PULSE	P6404 18	⑱
P6206 19	■ REMOTE ⑲	P6404 19	⑲
P6206 20	START MARK Ⓗ	P6404 20	⑳
P6206 21	EJECT SW Ⓛ	P6404 21	㉑
P6206 22	AUDIO CH1 INSERT Ⓛ	P6404 22	㉒
P6206 23	REC HOLD Ⓛ	P6404 23	㉓
P6206 24	PLAY HOLD Ⓛ	P6404 24	㉔
P6206 25	FF HOLD Ⓛ	P6404 25	㉕
P6206 26	REW HOLD Ⓛ	P6404 26	㉖
P6206 27	AUDIO CH2 INSERT Ⓛ	P6404 27	㉗
P6206 28	AUDIO DUB HOLD Ⓛ	P6404 28	㉘
P6206 29	PAUSE HOLD Ⓛ	P6404 29	㉙
P6206 30	■ REMOTE ㉚	P6404 30	㉚
P6206 31	CUT IN HOLD Ⓛ	P6404 31	㉛
P6206 32	INSERT VIDEO	P6404 32	㉜
P6206 33	■ REMOTE ㉝	P6404 33	㉝
P6206 34	■ 12V DC	P6404 34	㉞

34PIN INFORMATION

.13.15 ~17.19.21.22.27.30.32.33
ITERNALLY PULLED-UP AT ABOUT

ITROLLER CIRCUITS FOR ■2 PINS
:D OPEN COLLECTOR OUTPUT
STOR LOGIC (TTL) LEVEL
'.H:2.4V ~5V) AS SHOWN BELOW.

■1 PINS 8.11.14.20.23 ~26.29.30 THESE SIGNALS OUTPUT BY OPEN COLLECTOR CIRCUIT THEREFORE. USER'S REMOTE CONTROLLER CIRCUITS FOR ■ 1 PINS SHOULD BE DESIGNED AS SHOWN BELOW.

2V FOR OTHER EQUIPMENT EXCEPT
)LLER AND EDITING REMOTE CONTROLLER

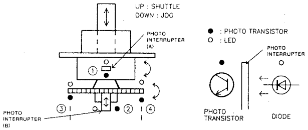
REMOTE SEARCH CONTROL SIGNALS

MODE / PIN NO.	REVERSE								FORWARD							
	× 10	× 6	× 2	× 1	×1/2	×1/5	×1/10	×1/25	×1/25	×1/10	×1/5	×1/2	× 1	× 2	× 6	× 10
REMOTE19 IC6201-3	L	H	L	H	L	H	L	H	H	L	H	L	H	L	H	L
REMOTE30 IC6201-2	H	H	H	H	L	L	L	L	L	L	L	L	H	H	H	H
REMOTE33 IC6201-1	L	L	H	H	H	H	L	L	L	L	H	H	H	H	L	L
FWD/REV IC6201-4	L	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H

L: LOW. STATUS H: HIGH. STATUS

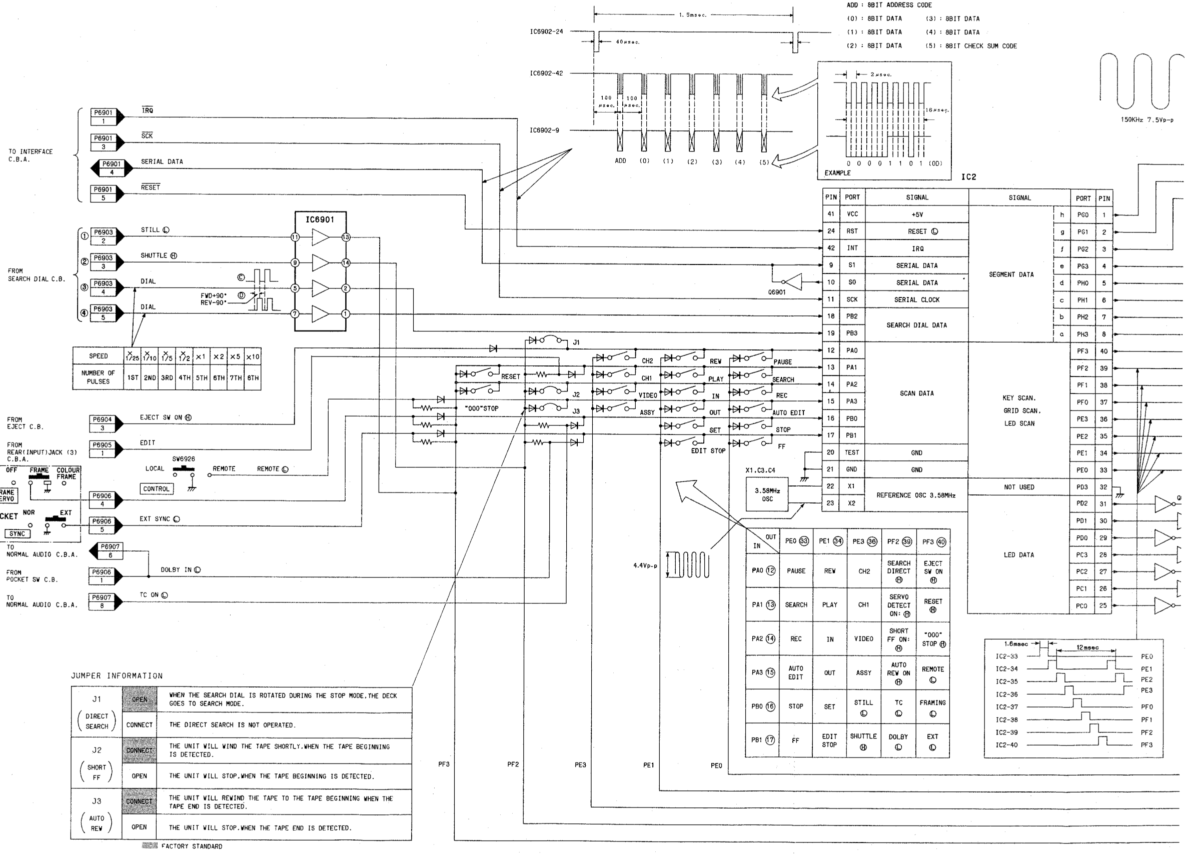
REF. NO. 6200 SERIES

KEY BOARD BLOCK DIAGRAM


UP : SHUTTLE
DOWN : JOG
PHOTO INTERRUPTER (A)
①
② ③ ④
PHOTO INTERRUPTER (B)
● : PHOTO TRANSISTOR
○ : LED
PHOTO INTERRUPTER
PHOTO TRANSISTOR
DIODE

PULSE WIDTH AT PIN19 OF IC2	SPEED
MORE THAN 121msec.	×1/25 INTERMITTENT PULSE DRIVE
42msec.~120msec.	×1/25
15msec.~41msec.	×1/10
LESS THAN 14msec.	×1/5

Jog Speed


IC6902-24
IC6902-42
IC6902-9
1.5msec.
40μsec.
100 μsec.
100 μsec.
ADD (0) (1) (2) (3) (4) (5)
2μsec.
16μsec.
0 0 0 0 1 1 0 1 (0D)
EXAMPLE
ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
150KHz 7.5Vp-p
IC2
TO INTERFACE C.B.A.
P6901 1 IRQ
P6901 3 SCK
P6901 4 SERIAL DATA
P6901 5 RESET
FROM SEARCH DIAL C.B.
① P6903 2 STILL Ⓛ
② P6903 3 SHUTTLE Ⓗ
③ P6903 4 DIAL
④ P6903 5 DIAL
IC6901
Ⓒ
Ⓓ
FWD+90°
REV-90°
FROM EJECT C.B.
P6904 3 EJECT SW ON Ⓗ
FROM REAR(INPUT)JACK (3) C.B.A.
P6905 1 EDIT
OFF FRAME COLOUR FRAME
FRAME SERVO
POCKET SW
NOR EXT
SYNC
P6906 4
P6906 5 EXT SYNC Ⓛ
LOCAL SW6926 REMOTE
CONTROL
REMOTE Ⓛ
TO NORMAL AUDIO C.B.A.
P6907 6
FROM POCKET SW C.B.
P6906 1 DOLBY IN Ⓛ
TO NORMAL AUDIO C.B.A.
P6907 8 TC ON Ⓛ
Q6901
J1
J2
J3
RESET
"000"STOP
CH2
CH1
VIDEO
ASSY
REW
PLAY
IN
OUT
SET
EDIT STOP
PAUSE
SEARCH
REC
AUTO EDIT
STOP
FF
X1.C3.C4
3.58MHz OSC
4.4Vp-p
1.6msec
12msec
IC2-33 PE0
IC2-34 PE1
IC2-35 PE2
IC2-36 PE3
IC2-37 PF0
IC2-38 PF1
IC2-39 PF2
IC2-40 PF3
PF3
PF2
PE3
PE1
PE0

SPEED	×1/25	×1/10	×1/5	×1/2	×1	×2	×5	×10
NUMBER OF PULSES	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH

IC2

PIN	PORT	SIGNAL
41	VCC	+5V
24	RST	RESET Ⓛ
42	INT	IRQ
9	S1	SERIAL DATA
10	S0	SERIAL DATA
11	SCK	SERIAL CLOCK
18	PB2	SEARCH DIAL DATA
19	PB3	
12	PA0	SCAN DATA
13	PA1	
14	PA2	
15	PA3	
16	PB0	
17	PB1	
20	TEST	GND
21	GND	GND
22	X1	REFERENCE OSC 3.58MHz
23	X2	

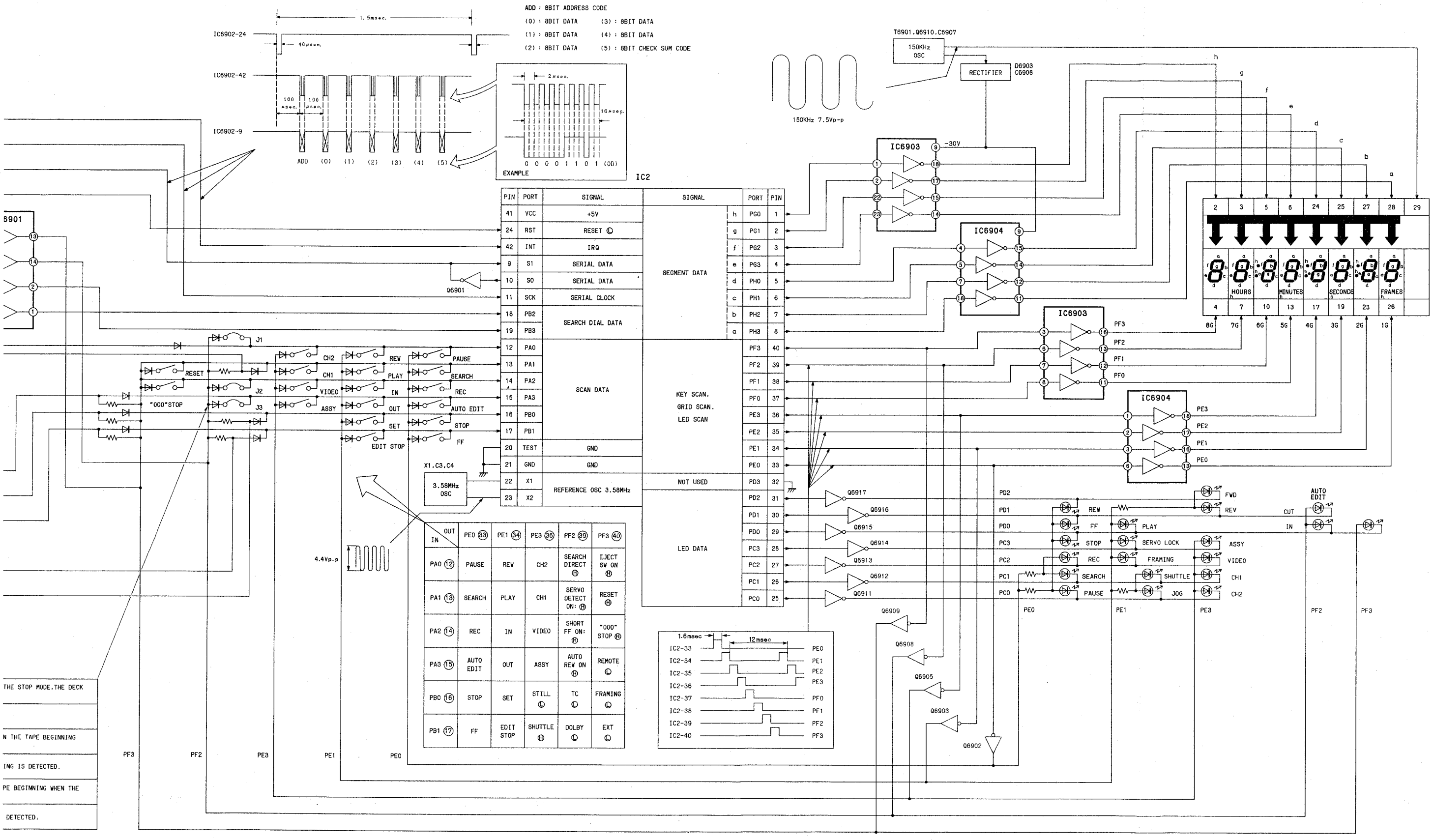
SIGNAL		PORT	PIN
SEGMENT DATA	h	PG0	1
	g	PG1	2
	f	PG2	3
	e	PG3	4
	d	PH0	5
	c	PH1	6
	b	PH2	7
	a	PH3	8
KEY SCAN, GRID SCAN, LED SCAN		PF3	40
		PF2	39
		PF1	38
		PF0	37
		PE3	36
		PE2	35
		PE1	34
		PE0	33
NOT USED		PD3	32
LED DATA		PD2	31
		PD1	30
		PD0	29
		PC3	28
		PC2	27
		PC1	26
		PC0	25

OUT / IN	PE0 ㉝	PE1 ㉞	PE3 ㊱	PF2 ㊴	PF3 ㊵
PA0 ⑫	PAUSE	REW	CH2	SEARCH DIRECT Ⓗ	EJECT SW ON Ⓗ
PA1 ⑬	SEARCH	PLAY	CH1	SERVO DETECT ON: Ⓗ	RESET Ⓗ
PA2 ⑭	REC	IN	VIDEO	SHORT FF ON: Ⓗ	"000" STOP Ⓗ
PA3 ⑮	AUTO EDIT	OUT	ASSY	AUTO REW ON Ⓗ	REMOTE Ⓛ
PB0 ⑯	STOP	SET	STILL Ⓛ	TC Ⓛ	FRAMING Ⓛ
PB1 ⑰	FF	EDIT STOP	SHUTTLE Ⓗ	DOLBY Ⓛ	EXT Ⓛ

JUMPER INFORMATION

J1 (DIRECT SEARCH)	▨ OPEN	WHEN THE SEARCH DIAL IS ROTATED DURING THE STOP MODE.THE DECK GOES TO SEARCH MODE.
	CONNECT	THE DIRECT SEARCH IS NOT OPERATED.
J2 (SHORT FF)	▨ CONNECT	THE UNIT WILL WIND THE TAPE SHORTLY.WHEN THE TAPE BEGINNING IS DETECTED.
	OPEN	THE UNIT WILL STOP.WHEN THE TAPE BEGINNING IS DETECTED.
J3 (AUTO REW)	▨ CONNECT	THE UNIT WILL REWIND THE TAPE TO THE TAPE BEGINNING WHEN THE TAPE END IS DETECTED.
	OPEN	THE UNIT WILL STOP.WHEN THE TAPE END IS DETECTED.

▨ FACTORY STANDARD


ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
IC6902-24
IC6902-42
IC6902-9
1.5msec.
40μsec.
100 μsec.
100 μsec.
ADD
(0)
(1)
(2)
(3)
(4)
(5)
2μsec.
16μsec.
0 0 0 0 1 1 0 1 (0D)
EXAMPLE
IC2
PIN
PORT
SIGNAL
SIGNAL
PORT
PIN
41 VCC +5V
24 RST RESET Ⓛ
42 INT IRQ
9 S1 SERIAL DATA
10 SO SERIAL DATA
11 SCK SERIAL CLOCK
18 PB2
19 PB3
SEARCH DIAL DATA
12 PA0
13 PA1
14 PA2
15 PA3
16 PB0
17 PB1
SCAN DATA
20 TEST GND
21 GND GND
22 X1
23 X2
REFERENCE OSC 3.58MHz
SEGMENT DATA
h PG0 1
g PG1 2
f PG2 3
e PG3 4
d PH0 5
c PH1 6
b PH2 7
a PH3 8
KEY SCAN.
GRID SCAN.
LED SCAN
PF3 40
PF2 39
PF1 38
PF0 37
PE3 36
PE2 35
PE1 34
PE0 33
NOT USED
PD3 32
LED DATA
PD2 31
PD1 30
PD0 29
PC3 28
PC2 27
PC1 26
PC0 25
6901
Q6901
X1.C3.C4
3.58MHz OSC
4.4Vp-p
J1
J2
J3
RESET
"000"STOP
CH2
CH1
VIDEO
ASSY
REW
PLAY
IN
OUT
SET
EDIT STOP
PAUSE
SEARCH
REC
AUTO EDIT
STOP
FF
T6901.Q6910.C6907
150KHz OSC
RECTIFIER
D6903
C6908
150KHz 7.5Vp-p
-30V
IC6903
IC6904
IC6903
IC6904
h
g
f
e
d
c
b
a
2 3 5 6 24 25 27 28 29
HOURS
MINUTES
SECONDS
FRAMES
4 7 10 13 17 19 23 26
8G 7G 6G 5G 4G 3G 2G 1G
PF3
PF2
PF1
PF0
PE3
PE2
PE1
PE0
Q6917
Q6916
Q6915
Q6914
Q6913
Q6912
Q6911
PD2
PD1
PD0
PC3
PC2
PC1
PC0
FWD
REV
REW
PLAY
FF
STOP
SERVO LOCK
ASSY
REC
FRAMING
VIDEO
SEARCH
SHUTTLE
CH1
PAUSE
JOG
CH2
AUTO EDIT
CUT
IN
PE0
PE1
PE3
PF2
PF3
Q6909
Q6908
Q6905
Q6903
Q6902
1.6msec
12msec
IC2-33
IC2-34
IC2-35
IC2-36
IC2-37
IC2-38
IC2-39
IC2-40
PE0
PE1
PE2
PE3
PF0
PF1
PF2
PF3
PF3
PF2
PE3
PE1
PE0

IN \ OUT	PE0 ㉝	PE1 ㉞	PE3 ㊱	PF2 ㊴	PF3 ㊵
PA0 ⑫	PAUSE	REW	CH2	SEARCH DIRECT Ⓗ	EJECT SW ON Ⓗ
PA1 ⑬	SEARCH	PLAY	CH1	SERVO DETECT ON: Ⓗ	RESET Ⓗ
PA2 ⑭	REC	IN	VIDEO	SHORT FF ON: Ⓗ	"000" STOP Ⓗ
PA3 ⑮	AUTO EDIT	OUT	ASSY	AUTO REW ON Ⓗ	REMOTE Ⓛ
PB0 ⑯	STOP	SET	STILL Ⓛ	TC Ⓛ	FRAMING Ⓛ
PB1 ⑰	FF	EDIT STOP	SHUTTLE Ⓗ	DOLBY Ⓛ	EXT Ⓛ

THE STOP MODE.THE DECK

N THE TAPE BEGINNING

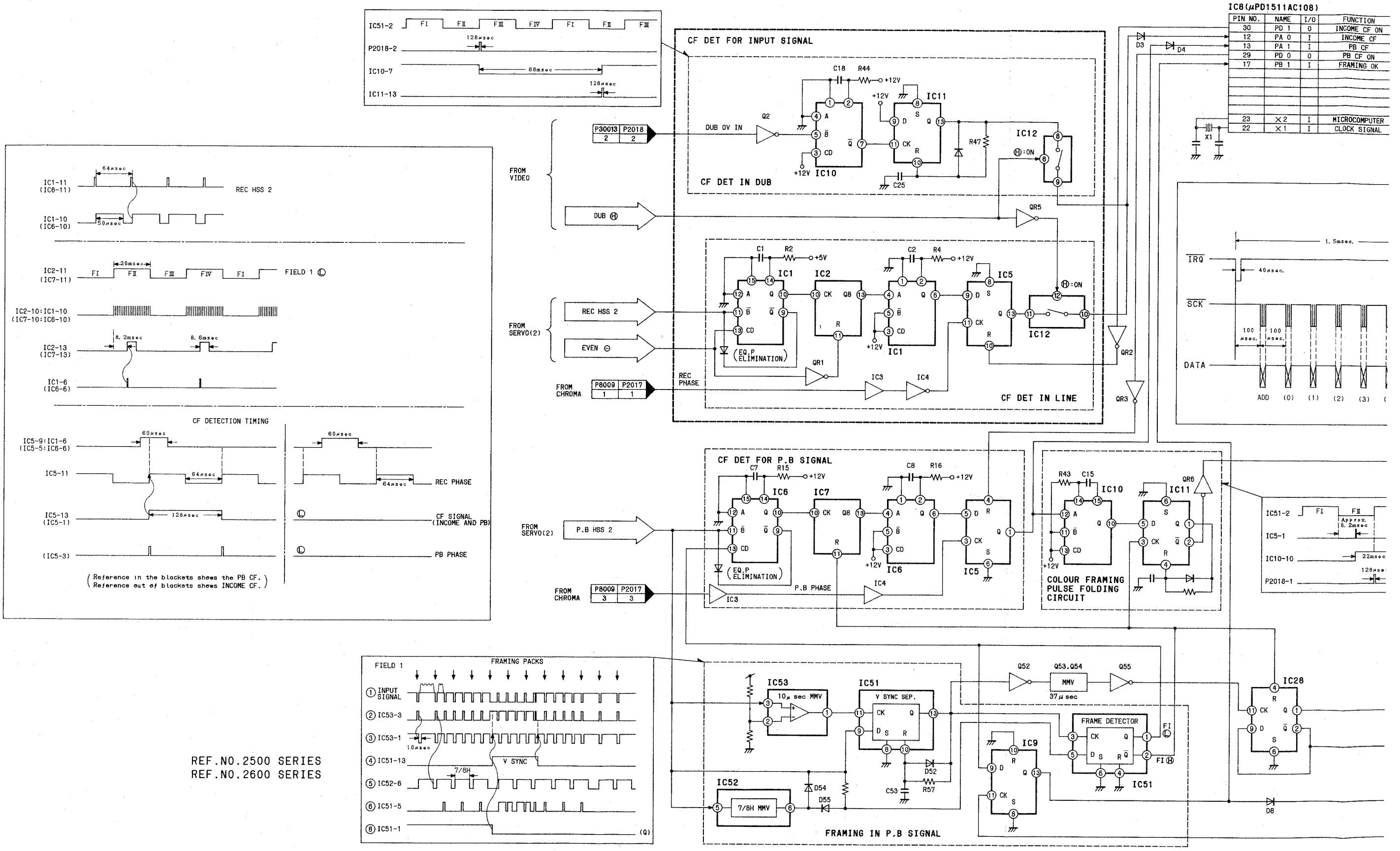
ING IS DETECTED.

PE BEGINNING WHEN THE

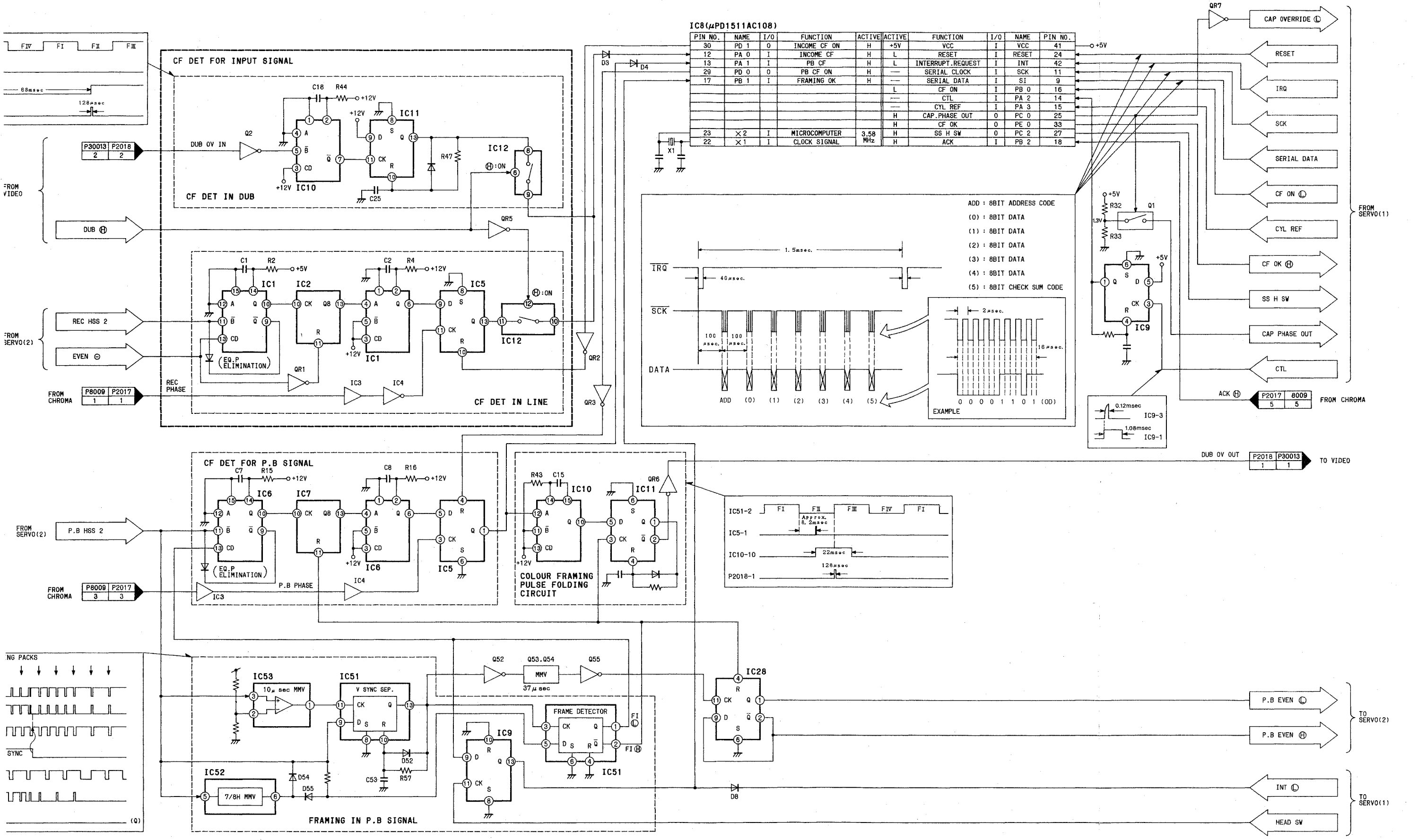
DETECTED.

REF.NO. 6900 SERIES

COLOUR FRAMING BLOCK DIAGRAM


IC51-2
FI
FII
FIII
FIV
P2018-2
128μsec
IC10-7
68msec
IC11-13
IC1-11 (IC6-11)
64μsec
REC HSS 2
IC1-10 (IC6-10)
50μsec
IC2-11 (IC7-11)
20msec
FIELD 1 Ⓛ
IC2-10:IC1-10 (IC7-10:IC6-10)
IC2-13 (IC7-13)
8. 2msec
8. 6msec
IC1-6 (IC6-6)
CF DETECTION TIMING
IC5-9:IC1-6 (IC5-5:IC6-6)
60μsec
IC5-11
64μsec
REC PHASE
IC5-13 (IC5-1)
128μsec
CF SIGNAL (INCOME AND PB)
(IC5-3)
PB PHASE
(Reference in the blackets shows the PB CF. Reference out of blackets shows INCOME CF.)
FROM VIDEO
P30013
P2018
DUB OV IN
DUB Ⓗ
FROM SERVO(2)
REC HSS 2
EVEN ⊖
FROM CHROMA
P8009
P2017
REC PHASE
CF DET FOR INPUT SIGNAL
C18
R44
+12V
IC11
Q2
IC10
R47
IC12
Ⓗ:ON
C25
CF DET IN DUB
QR5
C1
R2
+5V
C2
R4
IC1
IC2
IC5
(EQ.P ELIMINATION)
QR1
IC3
IC4
CF DET IN LINE
QR2
QR3
IC8(μPD1511AC108)
PIN NO.
NAME
I/O
FUNCTION
30 PD 1 O INCOME CF ON
12 PA 0 I INCOME CF
13 PA 1 I PB CF
29 PD 0 O PB CF ON
17 PB 1 I FRAMING OK
23 X2 I MICROCOMPUTER
22 X1 I CLOCK SIGNAL
D3
D4
X1
IRQ
SCK
DATA
1. 5msec.
40μsec.
100 μsec.
ADD (0) (1) (2) (3)
CF DET FOR P.B SIGNAL
C7
R15
C8
R16
IC6
IC7
P.B HSS 2
P.B PHASE
R43
C15
QR6
COLOUR FRAMING PULSE FOLDING CIRCUIT
IC51-2
IC5-1
IC10-10
P2018-1
Approx. 8. 2msec
22msec
FIELD 1
FRAMING PACKS
① INPUT SIGNAL
② IC53-3
③ IC53-1
10μsec
④ IC51-13
V SYNC
7/8H
⑤ IC52-6
⑥ IC51-5
⑧ IC51-1
(Q)
IC53
10μ sec MMV
IC51
V SYNC SEP.
Q52
Q53.Q54
MMV
37μ sec
Q55
FRAME DETECTOR
FI Ⓛ
FI Ⓗ
IC9
IC28
IC52
7/8H MMV
D52
D54
D55
C53
R57
D8
FRAMING IN P.B SIGNAL

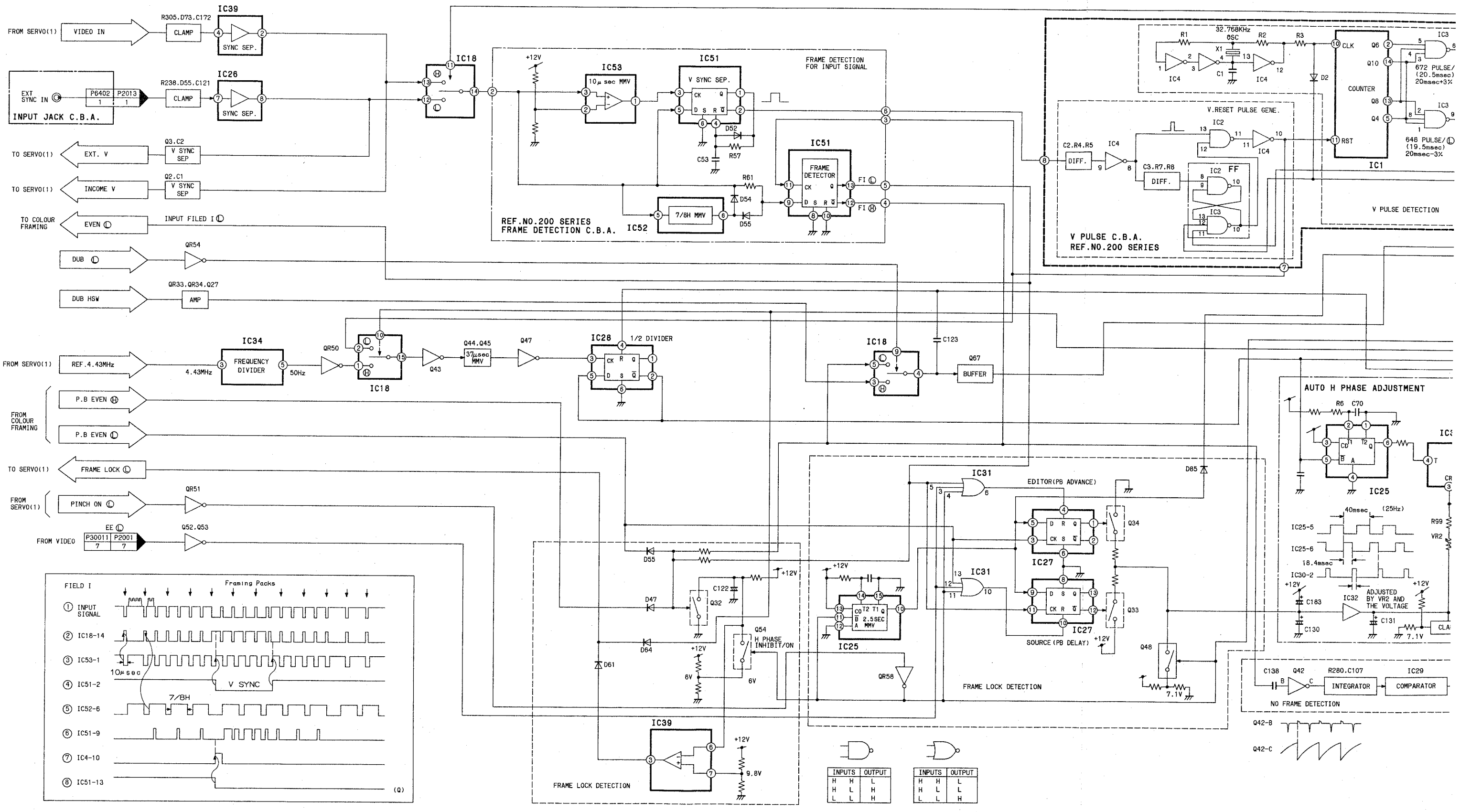
REF.NO.2500 SERIES
REF.NO.2600 SERIES

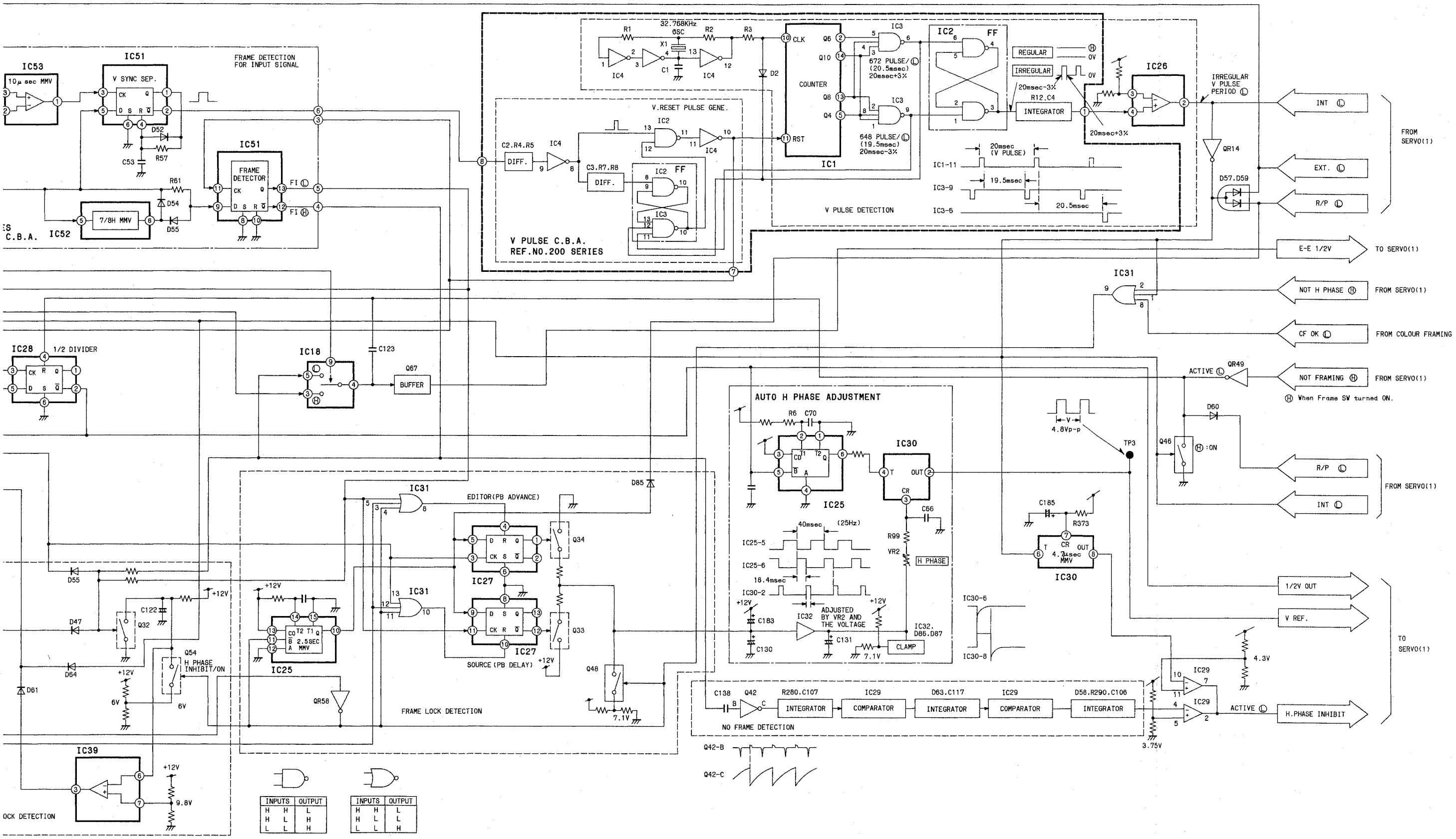

CF DET FOR INPUT SIGNAL
CF DET IN DUB
C18
R44
+12V
IC11
IC12
IC10
Q2
DUB OV IN
R47
C25
⊕:ON
P30013
P2018
FROM VIDEO
DUB ⊕
QR5
CF DET IN LINE
C1
R2
+5V
IC1
IC2
C2
R4
IC5
REC HSS 2
EVEN ⊖
FROM SERVO(2)
(EQ.P ELIMINATION)
QR1
REC PHASE
IC3
IC4
FROM CHROMA
P8009
P2017
QR2
QR3
D3
D4
X1
68msec
128μsec
CF DET FOR P.B SIGNAL
C7
R15
IC6
IC7
C8
R16
P.B HSS 2
P.B PHASE
COLOUR FRAMING PULSE FOLDING CIRCUIT
R43
C15
QR6
DUB OV OUT
TO VIDEO
IC51-2
IC5-1
IC10-10
P2018-1
Approx. 8.2msec
22msec
128μsec
FRAMING IN P.B SIGNAL
IC53
10μ sec MMV
IC51
V SYNC SEP.
Q52
Q53,Q54
MMV
37μ sec
Q55
FRAME DETECTOR
FI Ⓛ
FI ⊕
IC52
7/8H MMV
D52
D53
D54
D55
R57
C53
IC9
IC28
SYNC
NG PACKS
(Q)
P.B EVEN Ⓛ
P.B EVEN ⊕
TO SERVO(2)
INT Ⓛ
HEAD SW
TO SERVO(1)
D8
ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
IRQ
SCK
DATA
1.5msec.
40μsec.
100 μsec.
2μsec.
16μsec.
EXAMPLE
0 0 0 0 1 1 0 1 (OD)
QR7
CAP OVERRIDE Ⓛ
RESET
IRQ
SCK
SERIAL DATA
CF ON Ⓛ
CYL REF
CF OK ⊕
SS H SW
CAP PHASE OUT
CTL
FROM SERVO(1)
ACK ⊕
FROM CHROMA
R32
R33
Q1
1.3V
0.12msec
IC9-3
1.08msec
IC9-1

IC8(μPD1511AC108)

PIN NO.	NAME	I/O	FUNCTION	ACTIVE	ACTIVE	FUNCTION	I/O	NAME	PIN NO.
30	PD 1	0	INCOME CF ON	H	+5V	VCC	I	VCC	41
12	PA 0	I	INCOME CF	H	L	RESET	I	RESET	24
13	PA 1	I	PB CF	H	L	INTERRUPT.REQUEST	I	INT	42
29	PD 0	0	PB CF ON	H	—	SERIAL CLOCK	I	SCK	11
17	PB 1	I	FRAMING OK	H	—	SERIAL DATA	I	SI	9
					L	CF ON	I	PB 0	16
					—	CTL	I	PA 2	14
					—	CYL REF	I	PA 3	15
					H	CAP.PHASE OUT	0	PC 0	25
					H	CF OK	0	PE 0	33
23	×2	I	MICROCOMPUTER	3.58 MHz	H	SS H SW	0	PC 2	27
22	×1	I	CLOCK SIGNAL		H	ACK	I	PB 2	18

SERVO (2) BLOCK DIAGRAM

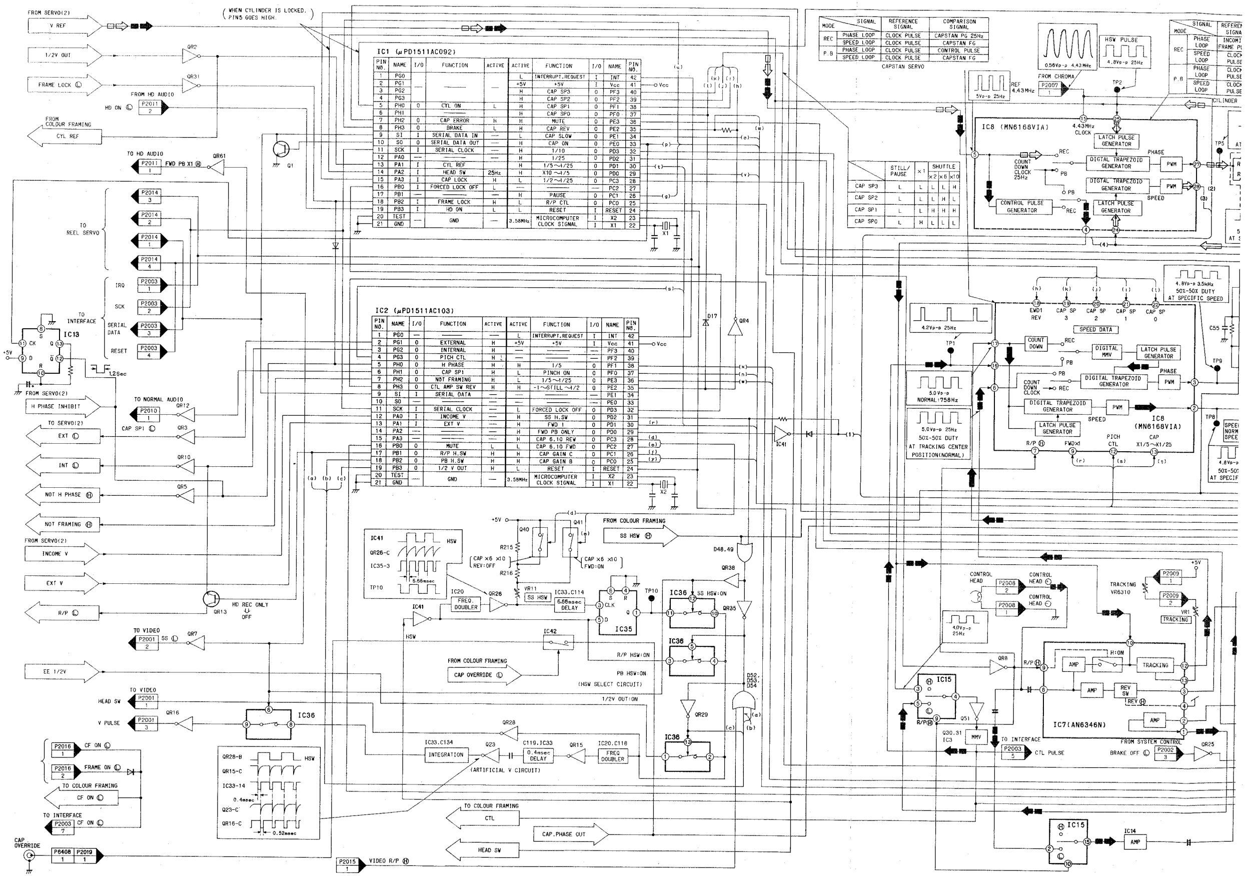

FROM SERVO(1)
VIDEO IN
R305.D73.C172
CLAMP
IC39
SYNC SEP.
EXT SYNC IN
P6402
P2013
INPUT JACK C.B.A.
R238.D55.C121
IC26
TO SERVO(1)
EXT. V
Q3.C2
V SYNC SEP
INCOME V
Q2.C1
TO COLOUR FRAMING
EVEN Ⓛ
INPUT FILED I Ⓛ
DUB Ⓛ
QR54
DUB HSW
QR33.QR34.Q27
AMP
IC18
+12V
IC53
10μ sec MMV
IC51
V SYNC SEP.
FRAME DETECTION FOR INPUT SIGNAL
D52
C53
R57
R61
D54
D55
7/8H MMV
IC52
FRAME DETECTOR
FI Ⓛ
FI Ⓗ
REF.NO.200 SERIES FRAME DETECTION C.B.A.
32.768KHz
OSC
R1
R2
R3
X1
C1
IC4
D2
CLK
COUNTER
RST
IC1
IC3
672 PULSE/ (20.5msec) 20msec+3%
648 PULSE/Ⓛ (19.5msec) 20msec-3%
V.RESET PULSE GENE.
IC2
C2.R4.R5
DIFF.
C3.R7.R8
FF
V PULSE DETECTION
V PULSE C.B.A. REF.NO.200 SERIES
FROM SERVO(1)
REF.4.43MHz
IC34
FREQUENCY DIVIDER
4.43MHz
50Hz
QR50
Q43
Q44.Q45
37μsec MMV
Q47
IC28
1/2 DIVIDER
C123
Q67
BUFFER
FROM COLOUR FRAMING
P.B EVEN Ⓗ
P.B EVEN Ⓛ
TO SERVO(1)
FRAME LOCK Ⓛ
FROM SERVO(1)
PINCH ON Ⓛ
QR51
EE Ⓛ
FROM VIDEO
P30011
P2001
Q52.Q53
AUTO H PHASE ADJUSTMENT
R6
C70
IC25
IC31
EDITOR(PB ADVANCE)
IC27
Q34
Q33
SOURCE(PB DELAY)
D85
D55
D47
C122
Q32
D64
Q54
H PHASE INHIBIT/ON
D61
6V
QR58
IC25
2.5SEC MMV
FRAME LOCK DETECTION
Q48
7.1V
IC39
+12V
9.8V
FRAME LOCK DETECTION
40msec
(25Hz)
IC25-5
IC25-6
18.4msec
IC30-2
C183
C130
IC32
ADJUSTED BY VR2 AND THE VOLTAGE
C131
R99
VR2
C138
Q42
R280.C107
IC29
INTEGRATOR
COMPARATOR
NO FRAME DETECTION
Q42-B
Q42-C
FIELD I
Framing Packs
① INPUT SIGNAL
② IC18-14
③ IC53-1
10μsec
④ IC51-2
V SYNC
⑤ IC52-6
7/8H
⑥ IC51-9
⑦ IC4-10
⑧ IC51-13
(Q)
INPUTS | OUTPUT
H H | L
H L | H
L L | H
INPUTS | OUTPUT
H H | L
H L | L
L L | H


IC53
10μ sec MMV
IC51
V SYNC SEP.
FRAME DETECTION FOR INPUT SIGNAL
IC51
FRAME DETECTOR
FI Ⓛ
FI Ⓗ
R61
D54
D55
D52
R57
C53
IC52
7/8H MMV
C.B.A.
32.768KHz OSC
X1
R1
R2
R3
C1
IC4
D2
COUNTER
CLK
RST
IC1
IC3
IC2 FF
672 PULSE/Ⓛ (20.5msec) 20msec+3%
648 PULSE/Ⓛ (19.5msec) 20msec-3%
REGULAR
IRREGULAR
20msec-3%
R12.C4
INTEGRATOR
20msec+3%
IC26
IRREGULAR V PULSE PERIOD Ⓛ
V.RESET PULSE GENE.
C2.R4.R5
DIFF.
C3.R7.R8
DIFF.
V PULSE C.B.A. REF.NO.200 SERIES
20msec (V PULSE)
IC1-11
IC3-9
19.5msec
IC3-6
20.5msec
V PULSE DETECTION
QR14
D57.D59
INT Ⓛ
EXT. Ⓛ
R/P Ⓛ
FROM SERVO(1)
E-E 1/2V
TO SERVO(1)
IC31
NOT H PHASE Ⓗ
FROM SERVO(1)
CF OK Ⓛ
FROM COLOUR FRAMING
ACTIVE Ⓛ
QR49
NOT FRAMING Ⓗ
FROM SERVO(1)
Ⓗ When Frame SW turned ON.
IC28
1/2 DIVIDER
IC18
C123
Q67
BUFFER
AUTO H PHASE ADJUSTMENT
R6
C70
IC25
IC30
CR
OUT
C66
R99
VR2
H PHASE
40msec (25Hz)
IC25-5
IC25-6
18.4msec
IC30-2
+12V
C183
C130
IC32
ADJUSTED BY VR2 AND THE VOLTAGE
C131
7.1V
CLAMP
IC32, D86,D87
4.8Vp-p
TP3
D60
Q46
Ⓗ:ON
R/P Ⓛ
INT Ⓛ
FROM SERVO(1)
C185
R373
IC30
4.74μsec MMV
IC30-6
IC30-8
1/2V OUT
V REF.
TO SERVO(1)
IC29
4.3V
ACTIVE Ⓛ
H.PHASE INHIBIT
3.75V
C138
Q42
R280.C107
INTEGRATOR
IC29
COMPARATOR
D63.C117
INTEGRATOR
IC29
COMPARATOR
D58.R290.C106
INTEGRATOR
NO FRAME DETECTION
Q42-B
Q42-C
D85
IC31
EDITOR(PB ADVANCE)
IC27
Q34
IC31
IC27
Q33
SOURCE(PB DELAY)
Q48
7.1V
IC25
2.5SEC MMV
QR58
FRAME LOCK DETECTION
D55
D47
Q32
C122
D64
D61
Q54
H PHASE INHIBIT/ON
6V
6V
IC39
+12V
9.8V
OCK DETECTION

INPUTS		OUTPUT
H	H	L
H	L	H
L	L	H

INPUTS		OUTPUT
H	H	L
H	L	L
L	L	H

SERVO (1) BLOCK DIAGRAM


FROM SERVO(2)
V REF
1/2V OUT
FRAME LOCK Ⓛ
QR2
QR31
FROM HD AUDIO
HD ON Ⓛ
P2011 2
FROM COLOUR FRAMING
CYL REF
(WHEN CYLINDER IS LOCKED, PIN5 GOES HIGH.)
TO HD AUDIO
P2011 1 FWD PB X1 Ⓗ
QR61
Q1
TO REEL SERVO
P2014 3
P2014 2
P2014 1
P2014 4
TO INTERFACE
IRQ
SCK
SERIAL DATA
RESET
P2003 1
P2003 2
P2003 3
P2003 4
IC13
1.2Sec
+5V
FROM SERVO(2)
H PHASE INHIBIT
TO NORMAL AUDIO
P2010 1
QR12
TO SERVO(2)
CAP SP1 Ⓛ
QR3
EXT Ⓛ
QR10
INT Ⓛ
QR5
NOT H PHASE Ⓗ
NOT FRAMING Ⓗ
FROM SERVO(2)
INCOME V
EXT V
R/P Ⓛ
QR13
HD REC ONLY ↓ OFF
TO VIDEO
P2001 2 SS Ⓛ
QR7
EE 1/2V
TO VIDEO
HEAD SW
P2001 1
V PULSE
P2001 3
QR16
IC36
P2016 1 CF ON Ⓛ
P2016 2 FRAME ON Ⓛ
TO COLOUR FRAMING
CF ON Ⓛ
TO INTERFACE
P2003 7 CF ON Ⓛ
CAP OVERRIDE
P6408 1
P2019 1
IC41
QR26-C
IC35-3
TP10
HSW
6.66msec
IC20 FREQ. DOUBLER
QR26
CAP ×6 ×10 REV:OFF
CAP ×6 ×10 FWD:ON
Q40
Q41
R215
R216
VR11
SS HSW
IC33.C114 6.66msec DELAY
IC35
FROM COLOUR FRAMING
SS HSW Ⓗ
D48.49
QR38
QR35
SS HSW:ON
IC42
FROM COLOUR FRAMING
CAP OVERRIDE Ⓛ
R/P HSW:ON
PB HSW:ON
(HSW SELECT CIRCUIT)
1/2V OUT:ON
D52, D53, D54
QR29
QR28
IC33.C134 INTEGRATION
Q23
C119.IC33 0.4msec DELAY
QR15
IC20.C116 FREQ DOUBLER
(ARTIFICIAL V CIRCUIT)
QR28-B
QR15-C
IC33-14
0.4msec
Q23-C
QR16-C
0.52msec
TO COLOUR FRAMING
CTL
CAP.PHASE OUT
HEAD SW
P2015 1 VIDEO R/P Ⓗ
D17
QR4
IC41
X1
X2
FROM CHROMA
P2007 1
0.56Vp-p 4.43MHz
HSW PULSE
4.8Vp-p 25Hz
REF 4.43MHz
5Vp-p 25Hz
TP2
IC8 (MN6168VIA)
4.43MHz CLOCK
LATCH PULSE GENERATOR
PHASE
COUNT DOWN CLOCK 25Hz
REC
PB
DIGITAL TRAPEZOID GENERATOR
PWM
SPEED
CONTROL PULSE GENERATOR
CYLINDER
TP5
4.8Vp-p 3.5kHz 50%-50% DUTY AT SPECIFIC SPEED
EWD1 REV
CAP SP 3
CAP SP 2
CAP SP 1
CAP SP 0
SPEED DATA
C55
4.2Vp-p 25Hz
TP1
COUNT DOWN
DIGITAL MMV
LATCH PULSE GENERATOR
5.0Vp-p NORMAL:758Hz
5.0Vp-p 25Hz 50%-50% DUTY AT TRACKING CENTER POSITION(NORMAL)
TP9
TP8
IC8 (MN6168VIA)
R/P Ⓗ
FWD×1
PICH CTL
CAP X1/5~X1/25
CONTROL HEAD
P2008 2
P2008 1
CONTROL HEAD Ⓒ
TRACKING VR6310
P2009 1
P2009 2
TRACKING
VR1
+5V
QR8
4.0Vp-p 25Hz
IC15
Q51
Q30.31 IC3
MMV
H:ON
AMP
TRACKING
REV SW
IC7(AN6346N)
TO INTERFACE
P2003 5 CTL PULSE
FROM SYSTEM CONTROL
BRAKE OFF Ⓛ
P2002 3
QR25
IC15
IC14 AMP

IC1 (μPD1511AC092)

PIN NO.	NAME	I/O	FUNCTION	ACTIVE	ACTIVE	FUNCTION	I/O	NAME	PIN NO.
1	PG0	—	———	—	L	INTERRUPT.REQUEST	I	INT	42
2	PG1				+5V	+5V	I	Vcc	41
3	PG2				H	CAP SP3	0	PF3	40
4	PG3				H	CAP SP2	0	PF2	39
5	PH0	0	CYL ON	L	H	CAP SP1	0	PF1	38
6	PH1		———		H	CAP SP0	0	PF0	37
7	PH2	0	CAP ERROR	H	H	MUTE	0	PE3	36
8	PH3	0	BRAKE	L	H	CAP REV	0	PE2	35
9	SI	I	SERIAL DATA IN	—	L	CAP SLOW	0	PE1	34
10	S0	0	SERIAL DATA OUT	—	H	CAP ON	0	PE0	33
11	SCK	I	SERIAL CLOCK	—	H	1/10	0	PD3	32
12	PA0	—	———	—	H	1/25	0	PD2	31
13	PA1	I	CYL REF		H	1/5~1/25	0	PD1	30
14	PA2	I	HEAD SW	25Hz	H	X10 ~1/5	0	PD0	29
15	PA3	I	CAP LOCK	H	L	1/2~1/25	0	PC3	28
16	PB0	I	FORCED LOCK OFF	L	—	———	—	PC2	27
17	PB1	—	———	—	H	PAUSE	0	PC1	26
18	PB2	I	FRAME LOCK	H	L	R/P CTL	0	PC0	25
19	PB3	I	HD ON	L	L	RESET	I	RESET	24
20	TEST	—	GND	—	3.58MHz	MICROCOMPUTER CLOCK SIGNAL	I	X2	23
21	GND						I	X1	22

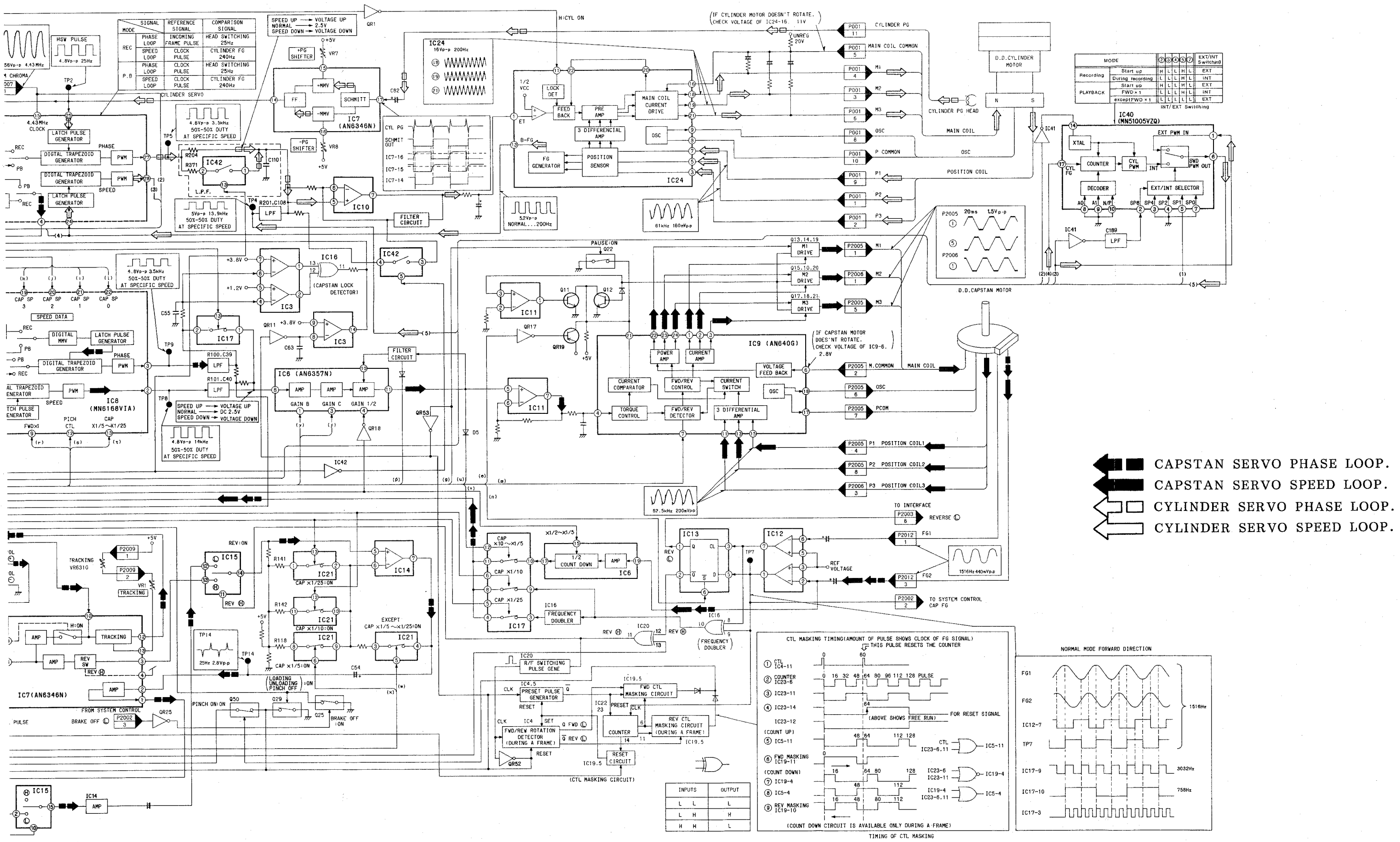
IC2 (μPD1511AC103)

PIN NO.	NAME	I/O	FUNCTION	ACTIVE	ACTIVE	FUNCTION	I/O	NAME	PIN NO.
1	PG0	—	———	—	L	INTERRUPT.REQUEST	I	INT	42
2	PG1	0	EXTERNAL	H	+5V	+5V	I	Vcc	41
3	PG2	0	INTERNAL	H	—	———	—	PF3	40
4	PG3	0	PICH CTL	H	—	———	—	PF2	39
5	PH0	0	H PHASE	H	H	1/5	0	PF1	38
6	PH1	0	CAP SP1	H	L	PINCH ON	0	PF0	37
7	PH2	0	NOT FRAMING	H	L	1/5~1/25	0	PE3	36
8	PH3	0	CTL AMP SW REV	H	H	-1~STILL~1/2	0	PE2	35
9	SI	I	SERIAL DATA	—	—	———	—	PE1	34
10	S0	—	———	—	—	———	—	PE0	33
11	SCK	I	SERIAL CLOCK	—	L	FORCED LOCK OFF	0	PD3	32
12	PA0	I	INCOME V	—	H	SS H.SW	0	PD2	31
13	PA1	I	EXT V	—	H	FWD 1	0	PD1	30
14	PA2	—	———	—	H	FWD PB ONLY	0	PD0	29
15	PA3	—	———	—	H	CAP 6.10 REW	0	PC3	28
16	PB0	0	MUTE	L	L	CAP 6.10 FWD	0	PC2	27
17	PB1	0	R/P H.SW	H	H	CAP GAIN C	0	PC1	26
18	PB2	0	PB H.SW	H	H	CAP GAIN B	0	PC0	25
19	PB3	0	1/2 V OUT	H	L	RESET	I	RESET	24
20	TEST	—	GND	—	3.58MHz	MICROCOMPUTER CLOCK SIGNAL	I	X2	23
21	GND						I	X1	22

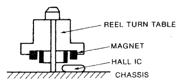
MODE \ SIGNAL		REFERENCE SIGNAL	COMPARISON SIGNAL
REC	PHASE LOOP	CLOCK PULSE	CAPSTAN PG 25Hz
	SPEED LOOP	CLOCK PULSE	CAPSTAN FG
P.B	PHASE LOOP	CLOCK PULSE	CONTROL PULSE
	SPEED LOOP	CLOCK PULSE	CAPSTAN FG

CAPSTAN SERVO

	STILL/ PAUSE	×1	SHUTTLE ×2	SHUTTLE ×6	SHUTTLE ×10
CAP SP3	L	L	L	L	H
CAP SP2	L	L	L	H	L
CAP SP1	L	L	H	H	H
CAP SP0	L	H	L	L	L


CAPSTAN SERVO PHASE LOOP.
CAPSTAN SERVO SPEED LOOP.
CYLINDER SERVO PHASE LOOP.
CYLINDER SERVO SPEED LOOP.
CYLINDER SERVO
IC7 (AN6346N)
IC8 (MN6168VIA)
IC24
IC9 (AN640G)
IC6 (AN6357N)
IC40 (MN51005VZQ)
D.D.CYLINDER MOTOR
D.D.CAPSTAN MOTOR
CYLINDER PG HEAD
MAIN COIL
POSITION COIL
IF CYLINDER MOTOR DOESN'T ROTATE, CHECK VOLTAGE OF IC24-16. 11V
IF CAPSTAN MOTOR DOESN'T ROTATE, CHECK VOLTAGE OF IC9-6. 2.8V
SPEED UP → VOLTAGE UP
NORMAL → 2.5V
SPEED DOWN → VOLTAGE DOWN
TO INTERFACE
TO SYSTEM CONTROL CAP FG
FROM SYSTEM CONTROL
CTL MASKING TIMING (AMOUNT OF PULSE SHOWS CLOCK OF FG SIGNAL)
THIS PULSE RESETS THE COUNTER
(ABOVE SHOWS FREE RUN)
FOR RESET SIGNAL
(COUNT DOWN CIRCUIT IS AVAILABLE ONLY DURING A FRAME)
TIMING OF CTL MASKING
(CTL MASKING CIRCUIT)
NORMAL MODE FORWARD DIRECTION
INPUTS OUTPUT
L L L
L H H
H H L

REEL SERVO BLOCK DIAGRAM


REEL TURN TABLE
MAGNET
HALL IC
CHASSIS

Hall IC

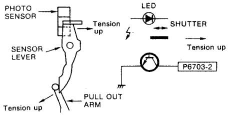
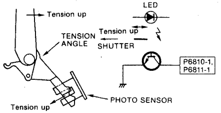
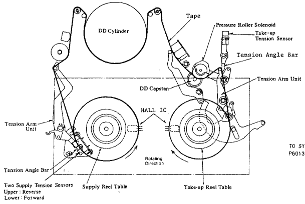


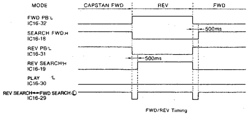
PHOTO SENSOR
LED
SHUTTER
Tension up
SENSOR LEVER
P6703-2
PULL OUT ARM
Tension up

Takeup Tension Sensor

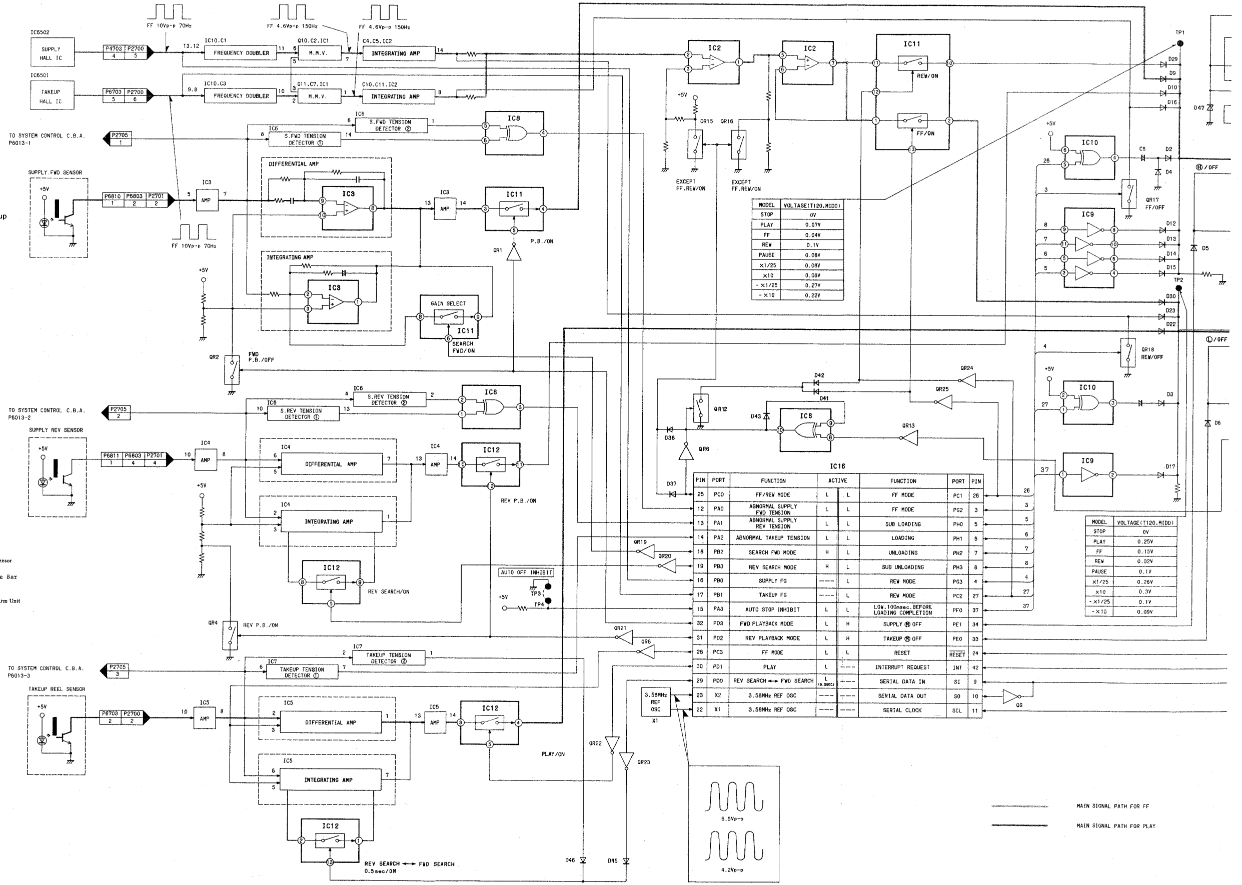

Tension up
LED
TENSION ANGLE
Tension up
SHUTTER
P6810-1
P6811-1
PHOTO SENSOR
Tension up

Supply Tension Sensor


DD Cylinder
Tape
Pressure Roller Solenoid
Take-up Tension Sensor
Tension Angle Bar
DD Capstan
Tension Arm Unit
HALL IC
Tension Arm Unit
Rotating Direction
Tension Angle Bar
Two Supply Tension Sensors
Upper : Reverse
Lower : Forward
Supply Reel Table
Take-up Reel Table



FWD/REV Timing

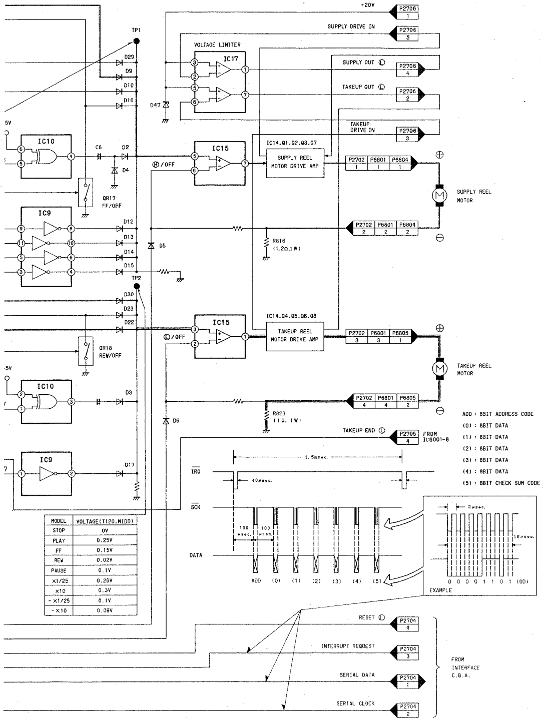

IC6502
SUPPLY HALL IC
IC6501
TAKEUP HALL IC
P4703
P2700
P6703
FF 10Vp-p 70Hz
FF 4.6Vp-p 150Hz
FF 4.6Vp-p 150Hz
IC10.C1
FREQUENCY DOUBLER
Q10.C2.IC1
M.M.V.
C4.C5.IC2
INTEGRATING AMP
IC10.C3
FREQUENCY DOUBLER
Q11.C7.IC1
M.M.V.
C10.C11.IC2
INTEGRATING AMP
TO SYSTEM CONTROL C.B.A. P6013-1
P2705
IC6
S.FWD TENSION DETECTOR ①
S.FWD TENSION DETECTOR ②
IC8
SUPPLY FWD SENSOR
+5V
P6810
P6803
P2701
IC3
AMP
DIFFERENTIAL AMP
IC3
IC11
QR1
P.B./ON
FF 10Vp-p 70Hz
INTEGRATING AMP
GAIN SELECT
IC11
SEARCH FWD/ON
QR2
FWD P.B./OFF
TO SYSTEM CONTROL C.B.A. P6013-2
S.REV TENSION DETECTOR ①
S.REV TENSION DETECTOR ②
SUPPLY REV SENSOR
P6811
IC4
AMP
DIFFERENTIAL AMP
INTEGRATING AMP
IC12
REV P.B./ON
REV SEARCH/ON
AUTO OFF INHIBIT
TP3
TP4
QR4
REV P.B./ON
TO SYSTEM CONTROL C.B.A. P6013-3
IC7
TAKEUP TENSION DETECTOR ①
TAKEUP TENSION DETECTOR ②
TAKEUP REEL SENSOR
IC5
AMP
DIFFERENTIAL AMP
INTEGRATING AMP
IC12
PLAY/ON
REV SEARCH ←→ FWD SEARCH 0.5sec/ON
QR19
QR20
QR21
QR8
QR22
QR23
D46
D45
3.58MHz REF OSC X1
6.5Vp-p
4.2Vp-p
IC2
IC2
IC11
REW/ON
FF/ON
QR15
QR16
EXCEPT FF.REW/ON
EXCEPT FF.REW/ON
TP1
D29
D9
D10
D16
D47
IC10
C8
D2
D4
Ⓗ/OFF
QR17
FF/OFF
IC9
D12
D13
D14
D15
D5
TP2
D30
D23
D22
QR18
REW/OFF
Ⓛ/OFF
QR24
QR25
D42
D41
QR12
D43
IC8
QR13
D38
QR6
D37
IC10
D3
D6
IC9
D17
IC16
Q9
MAIN SIGNAL PATH FOR FF
MAIN SIGNAL PATH FOR PLAY

IC16

PIN	PORT	FUNCTION	ACTIVE	ACTIVE	FUNCTION	PORT	PIN
25	PC0	FF/REW MODE	L	L	FF MODE	PC1	26
12	PA0	ABNORMAL SUPPLY FWD TENSION	L	L	FF MODE	PG2	3
13	PA1	ABNORMAL SUPPLY REV TENSION	L	L	SUB LOADING	PH0	5
14	PA2	ABNORMAL TAKEUP TENSION	L	L	LOADING	PH1	6
18	PB2	SEARCH FWD MODE	H	L	UNLOADING	PH2	7
19	PB3	REV SEARCH MODE	H	L	SUB UNLOADING	PH3	8
16	PB0	SUPPLY FG	---	L	REW MODE	PG3	4
17	PB1	TAKEUP FG	---	L	REW MODE	PC2	27
15	PA3	AUTO STOP INHIBIT	L	L	LOW.100msec.BEFORE LOADING COMPLETION	PF0	37
32	PD3	FWD PLAYBACK MODE	L	H	SUPPLY Ⓜ OFF	PE1	34
31	PD2	REV PLAYBACK MODE	L	H	TAKEUP Ⓜ OFF	PE0	33
28	PC3	FF MODE	L	L	RESET	$\overline{\text{RESET}}$	24
30	PD1	PLAY	L	---	INTERRUPT REQUEST	INT	42
29	PD0	REV SEARCH ←→ FWD SEARCH	L (0.5SEC)	---	SERIAL DATA IN	SI	9
23	X2	3.58MHz REF OSC	---	---	SERIAL DATA OUT	SO	10
22	X1	3.58MHz REF OSC	---	---	SERIAL CLOCK	SCL	11

MODEL	VOLTAGE(T120,MIDD)
STOP	0V
PLAY	0.07V
FF	0.04V
REW	0.1V
PAUSE	0.08V
×1/25	0.08V
×10	0.08V
-×1/25	0.27V
-×10	0.22V

MODEL	VOLTAGE(T120,MIDD)
STOP	0V
PLAY	0.25V
FF	0.15V
REW	0.02V
PAUSE	0.1V
×1/25	0.26V
×10	0.3V
-×1/25	0.1V
-×10	0.09V


+20V
P2708
SUPPLY DRIVE IN
P2706
TP1
VOLTAGE LIMITER
IC17
SUPPLY OUT Ⓛ
P2705
TAKEUP OUT Ⓛ
P2706
D29
D9
D10
D16
D47
TAKEUP DRIVE IN
P2706
5V
IC10
C8
D2
D4
IC15
Ⓗ/OFF
IC14.Q1.Q2.Q3.Q7
SUPPLY REEL MOTOR DRIVE AMP
P2702
P6801
P6804
SUPPLY REEL MOTOR
QR17
FF/OFF
IC9
D12
D13
D14
D15
D5
R816
(1.2Ω,1W)
TP2
D30
D23
D22
IC15
Ⓛ/OFF
IC14.Q4.Q5.Q6.Q8
TAKEUP REEL MOTOR DRIVE AMP
P2702
P6801
P6805
TAKEUP REEL MOTOR
QR18
REW/OFF
-5V
IC10
D3
D6
R823
(1Ω, 1W)
ADD : 8BIT ADDRESS CODE
(0) : 8BIT DATA
(1) : 8BIT DATA
(2) : 8BIT DATA
(3) : 8BIT DATA
(4) : 8BIT DATA
(5) : 8BIT CHECK SUM CODE
TAKEUP END Ⓛ
P2705
FROM IC6001-8
IC9
D17
1.5msec.
IRQ
40μsec.
SCK
100 μsec.
100 μsec.
2μsec.
16μsec.
DATA
ADD
(0)
(1)
(2)
(3)
(4)
(5)
0 0 0 0 1 1 0 1 (0D)
EXAMPLE
RESET Ⓛ
P2704
INTERRUPT REQUEST
P2704
SERIAL DATA
P2704
SERIAL CLOCK
P2704
FROM INTERFACE C.B.A.

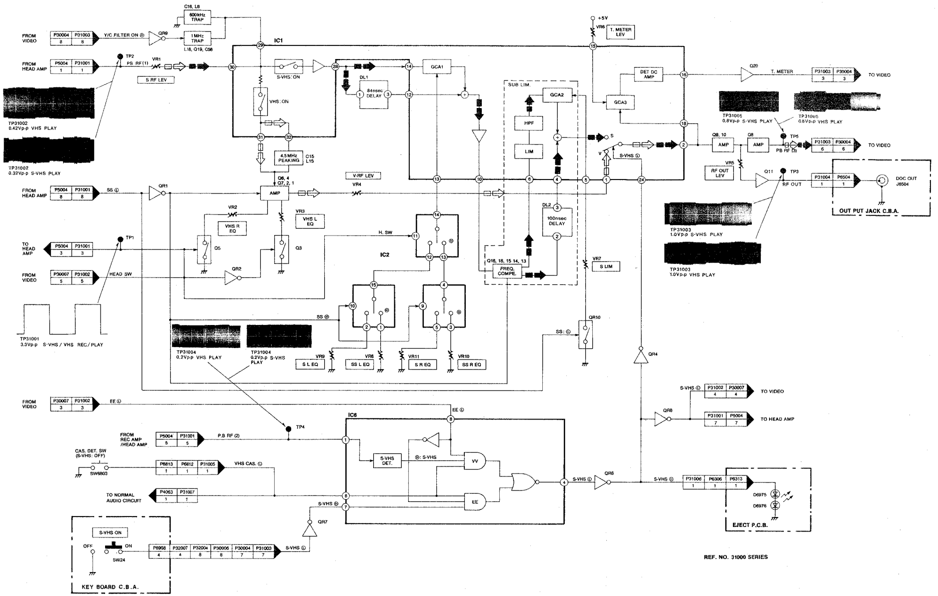
MODEL	VOLTAGE(T120.MIDD)
STOP	0V
PLAY	0.25V
FF	0.15V
REW	0.02V
PAUSE	0.1V
×1/25	0.26V
×10	0.3V
-×1/25	0.1V
-×10	0.09V

REF.NO.2700 SERIES

MAIN SIGNAL PATH FOR FF

MAIN SIGNAL PATH FOR PLAY

SUB VIDEO BLOCK DIAGRAM

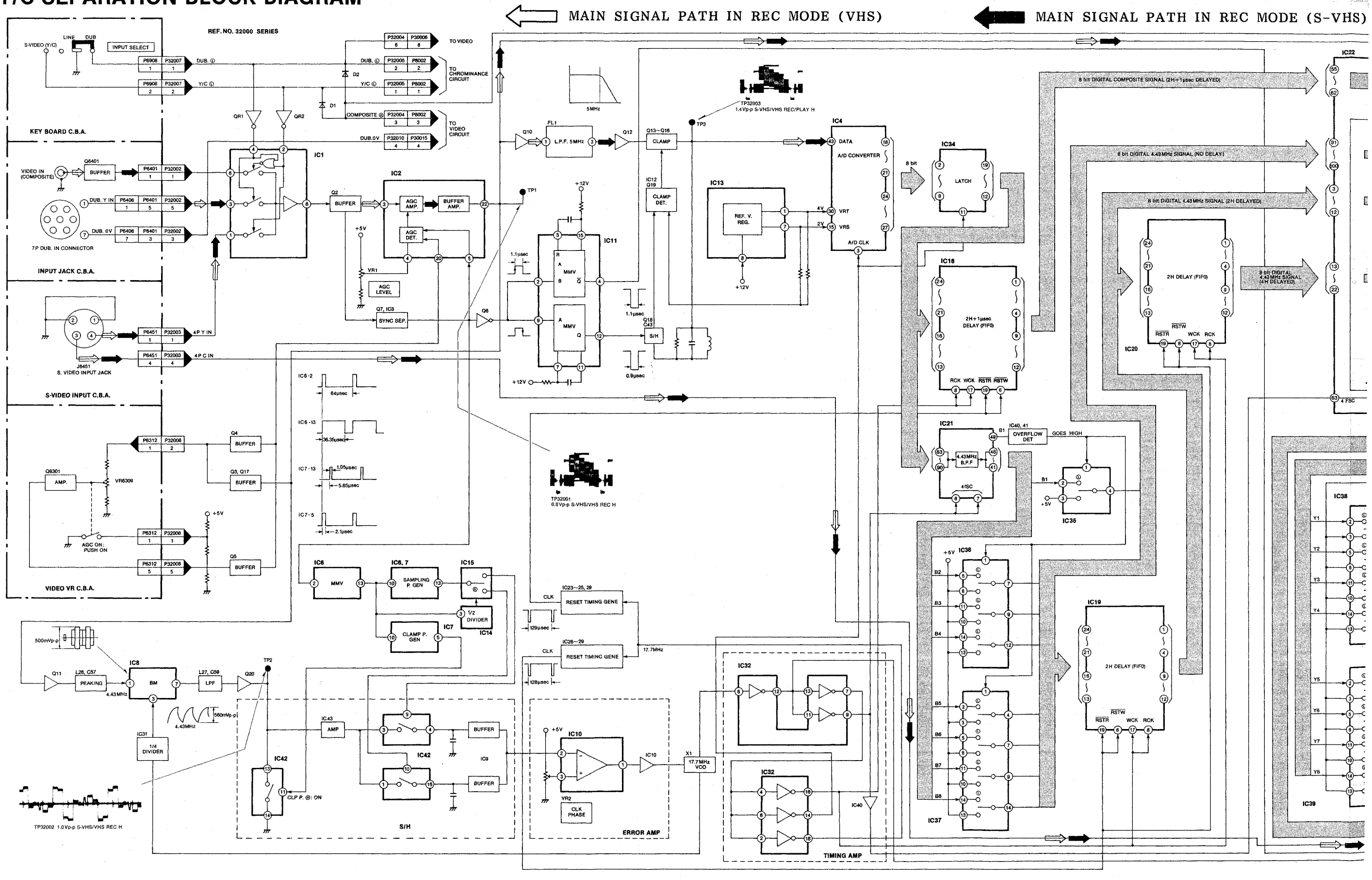

FROM VIDEO
P30004
P31003
Y/C FILTER ON Ⓗ
QR9
C16, L6
600kHz TRAP
1MHz TRAP
L18, Q19, C56
IC1
FROM HEAD AMP
P5004
P31001
TP2
PS RF(1)
VR1
S RF LEV
S-VHS : ON
VHS : ON
TP31002
0.42Vp-p VHS PLAY
TP31002
0.32Vp-p S-VHS PLAY
4.5MHz PEAKING
C15
L15
Q6, 4
Q7, 2, 1
AMP
FROM HEAD AMP
SS Ⓛ
QR1
VR2
VHS R EQ
VR3
VHS L EQ
TO HEAD AMP
TP1
Q5
Q3
QR2
FROM VIDEO
HEAD SW
TP31001
3.3Vp-p S-VHS / VHS REC/PLAY
DL1
84nsec DELAY
GCA1
V-RF LEV
VR4
H. SW
IC2
SS Ⓗ
TP31004
0.2Vp-p VHS PLAY
TP31004
0.2Vp-p S-VHS PLAY
VR9
S L EQ
VR8
SS L EQ
VR11
S R EQ
VR10
SS R EQ
SUB LIM
GCA2
HPF
LIM
DL2
100nsec DELAY
Q16, 18, 15 14, 13
FREQ. COMPE.
+5V
VR6
T. METER LEV
DET DC AMP
GCA3
Q20
T. METER
P31003
P30004
TO VIDEO
TP31005
0.8Vp-p S-VHS PLAY
TP31005
0.8Vp-p VHS PLAY
S
V
S-VHS Ⓛ
Q9, 10
AMP
Q8
AMP
TP5
PB RF (3)
TO VIDEO
VR5
RF OUT LEV
Q11
TP3
RF OUT
P31004
P6504
DOC OUT
J6504
OUT PUT JACK C.B.A.
TP31003
1.0Vp-p S-VHS PLAY
TP31003
1.0Vp-p VHS PLAY
VR7
S LIM
QR10
SS : Ⓛ
QR4
FROM VIDEO
P30007
P31002
EE Ⓛ
EE Ⓛ
IC6
TP4
FROM REC AMP /HEAD AMP
P5004
P31001
P.B RF (2)
CAS. DET. SW (S-VHS: OFF)
SW6803
P6813
P6812
P31005
VHS CAS. Ⓛ
S-VHS DET.
Ⓗ: S-VHS
VV
EE
TO NORMAL AUDIO CIRCUIT
P4063
P31007
S-VHS Ⓗ
QR7
S-VHS ON
OFF
ON
SW24
P6908
P32007
P32004
P30006
P30004
P31003
S-VHS Ⓛ
KEY BOARD C.B.A.
S-VHS Ⓛ
QR6
S-VHS Ⓛ
P31002
P30007
TO VIDEO
QR8
P31001
P5004
TO HEAD AMP
S-VHS Ⓛ
P31006
P6306
P6313
D6975
D6976
EJECT P.C.B.

REF. NO. 31000 SERIES

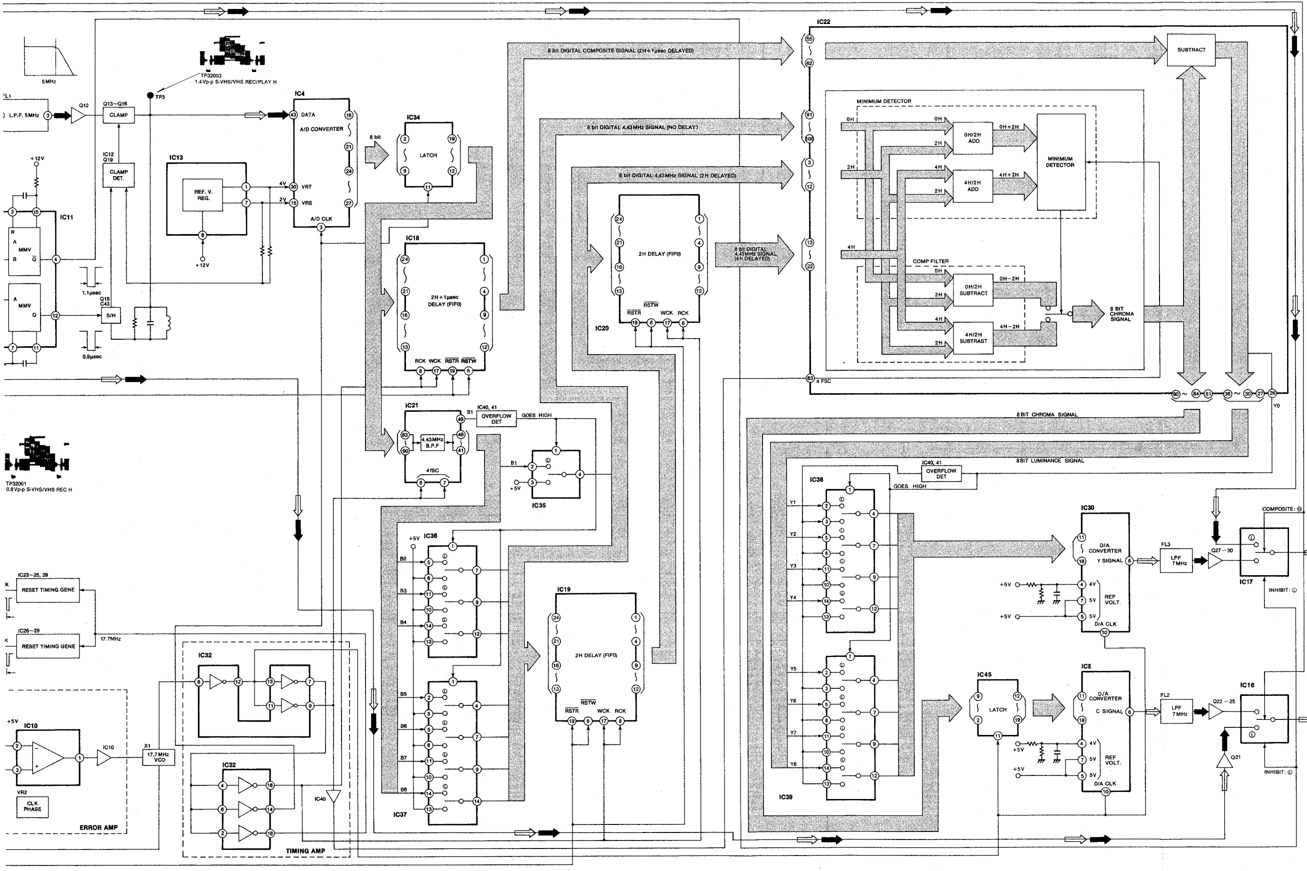
⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)

Y/C SEPARATION BLOCK DIAGRAM

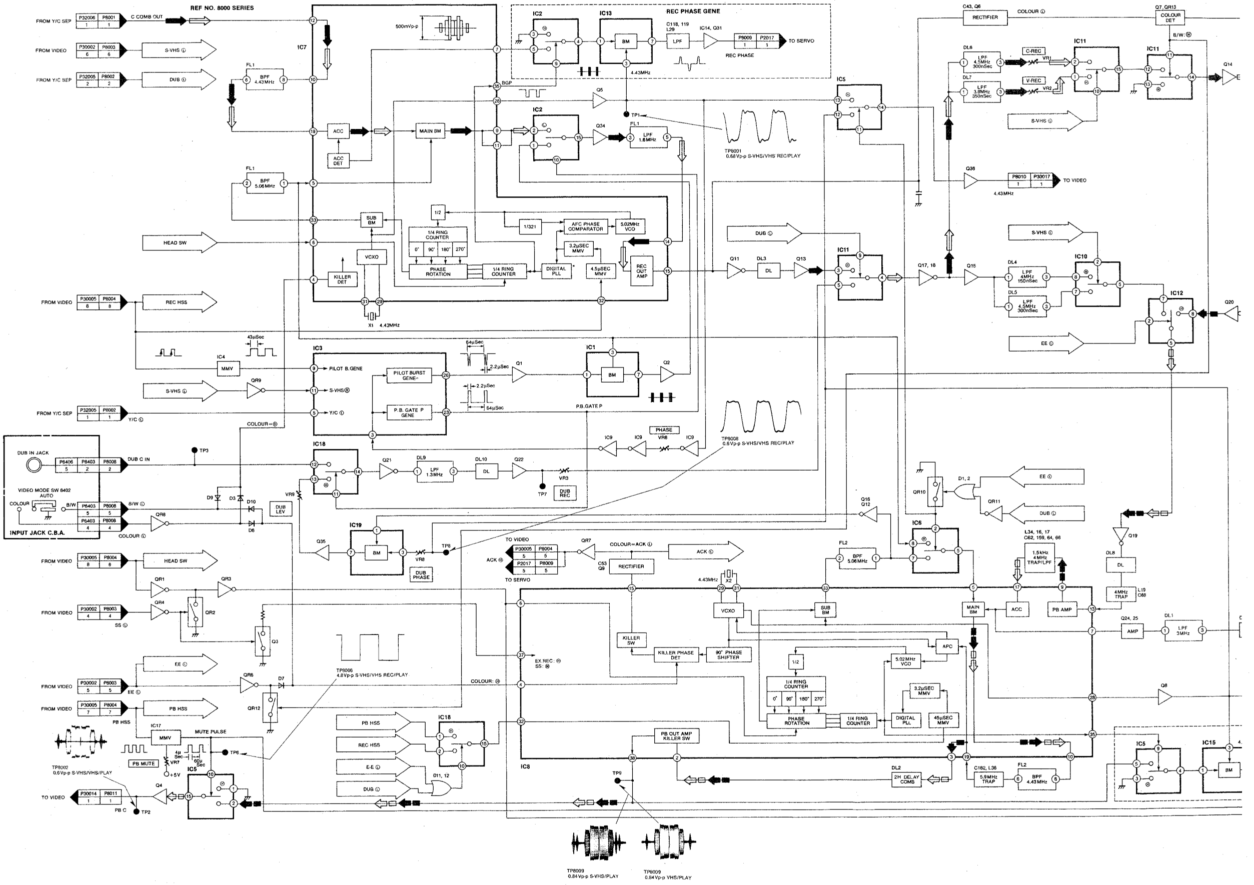

MAIN SIGNAL PATH IN REC MODE (VHS)
MAIN SIGNAL PATH IN REC MODE (S-VHS)
REF. NO. 32000 SERIES
S-VIDEO (Y/C)
LINE
DUB
INPUT SELECT
KEY BOARD C.B.A.
VIDEO IN (COMPOSITE)
BUFFER
DUB. Y IN
DUB. 0V
7P DUB. IN CONNECTOR
INPUT JACK C.B.A.
J6451 S. VIDEO INPUT JACK
S-VIDEO INPUT C.B.A.
VIDEO VR C.B.A.
AGC ON: PUSH ON
VR6309
AMP.
TO VIDEO
TO CHROMINANCE CIRCUIT
TO VIDEO CIRCUIT
DUB. ①
Y/C ①
COMPOSITE ④
DUB.0V
4P Y IN
4P C IN
IC1
IC2
AGC AMP.
AGC DET.
BUFFER AMP.
AGC LEVEL
SYNC SEP.
TP1
L.P.F. 5MHz
5MHz
CLAMP
CLAMP DET.
TP32003 1.4Vp-p S-VHS/VHS REC/PLAY H
TP3
IC4
DATA
A/D CONVERTER
VRT
VRS
A/D CLK
IC13
REF. V. REG.
IC11
MMV
S/H
1.1µsec
0.9µsec
IC34
LATCH
8 bit
IC18
2H+1µsec DELAY (FIFO)
RCK WCK RSTR RSTW
IC20
2H DELAY (FIFO)
IC21
4.43MHz B.P.F
4fSC
OVERFLOW DET
GOES HIGH
IC35
IC36
IC37
IC38
IC39
IC19
IC22
4 FSC
8 bit DIGITAL COMPOSITE SIGNAL (2H+1µsec DELAYED)
8 bit DIGITAL 4.43MHz SIGNAL (NO DELAY)
8 bit DIGITAL 4.43MHz SIGNAL (2H DELAYED)
8 bit DIGITAL 4.43MHz SIGNAL (4H DELAYED)
IC6-2 64µsec
IC6-13 36.35µsec
IC7-13 1.05µsec 5.65µsec
IC7-5 2.1µsec
TP32001 0.8Vp-p S-VHS/VHS REC H
IC6 MMV
IC6, 7 SAMPLING P. GEN
IC15
1/2 DIVIDER
IC14
CLAMP P. GEN
IC7
IC23~25, 29 RESET TIMING GENE
IC26~29 RESET TIMING GENE
CLK
129µsec
128µsec
17.7MHz
500mVp-p
IC8
BM
PEAKING
L26, C57
L27, C59
LPF
4.43MHz
560mVp-p
IC31 1/4 DIVIDER
TP2
IC43 AMP
IC42
CLP P. ④: ON
BUFFER
IC9
S/H
IC10
VR2
CLK PHASE
ERROR AMP
X1 17.7MHz VCO
IC32
IC40
TIMING AMP
TP32002 1.0Vp-p S-VHS/VHS REC H

MAIN SIGNAL PATH IN REC MODE (VHS)   MAIN SIGNAL PATH IN REC MODE (S-VHS)


5MHz
TP32003
1.4Vp-p S-VHS/VHS REC/PLAY H
TP3
FL1
L.P.F. 5MHz
Q12
Q13~Q16
CLAMP
IC12
Q19
CLAMP DET.
+12V
IC11
MMV
1.1μsec
0.9μsec
Q18
C43
S/H
IC13
REF. V. REG.
+12V
4V
2V
IC4
DATA
A/D CONVERTER
VRT
VRS
A/D CLK
8 bit
IC34
LATCH
IC18
2H+1μsec DELAY (FIFO)
RCK WCK RSTR RSTW
IC21
4.43MHz B.P.F
4fSC
B1
IC40, 41
OVERFLOW DET
GOES HIGH
+5V
IC35
8 bit DIGITAL COMPOSITE SIGNAL (2H+1μsec DELAYED)
8 bit DIGITAL 4.43MHz SIGNAL (NO DELAY)
8 bit DIGITAL 4.43MHz SIGNAL (2H DELAYED)
8 bit DIGITAL 4.43MHz SIGNAL (4H DELAYED)
2H DELAY (FIFO)
RSTR RSTW WCK RCK
IC20
TP32001
0.8Vp-p S-VHS/VHS REC H
IC23~25, 29
RESET TIMING GENE
IC26~29
RESET TIMING GENE
17.7MHz
IC32
+5V
IC10
VR2
CLK PHASE
ERROR AMP
X1
17.7MHz VCO
IC40
TIMING AMP
+5V IC36
B2 B3 B4 B5 B6 B7 B8
IC37
IC19
2H DELAY (FIFO)
IC22
MINIMUM DETECTOR
0H 2H 4H
0H/2H ADD
4H/2H ADD
0H+2H
4H+2H
MINIMUM DETECTOR
COMP FILTER
0H/2H SUBTRACT
4H/2H SUBTRAST
0H−2H
4H−2H
8 BIT CHROMA SIGNAL
SUBTRACT
4 FSC
Y0
8BIT CHROMA SIGNAL
8BIT LUMINANCE SIGNAL
IC38
Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
IC39
IC30
D/A CONVERTER
Y SIGNAL
REF VOLT.
D/A CLK
+5V
FL3
LPF 7MHz
Q27~30
IC17
COMPOSITE: Ⓗ
INHIBIT: Ⓛ
Q31
P32004 P3006
Y COMB OUT
TO VIDEO
IC45
LATCH
IC5
D/A CONVERTER
C SIGNAL
FL2
LPF 7MHz
Q22~25
IC16
Q21
Q26
P32006 P8001
C COMB OUT
TO CHROMA

CHROMINANCE BLOCK DIAGRAM

MAIN SIGNAL PATH IN REC MODE (VHS)
MAIN SIGNAL PATH IN REC MODE (S-VHS)
MAIN SIGNAL PATH IN PLAYBAC
MAIN SIGNAL PATH IN PLAYBAC

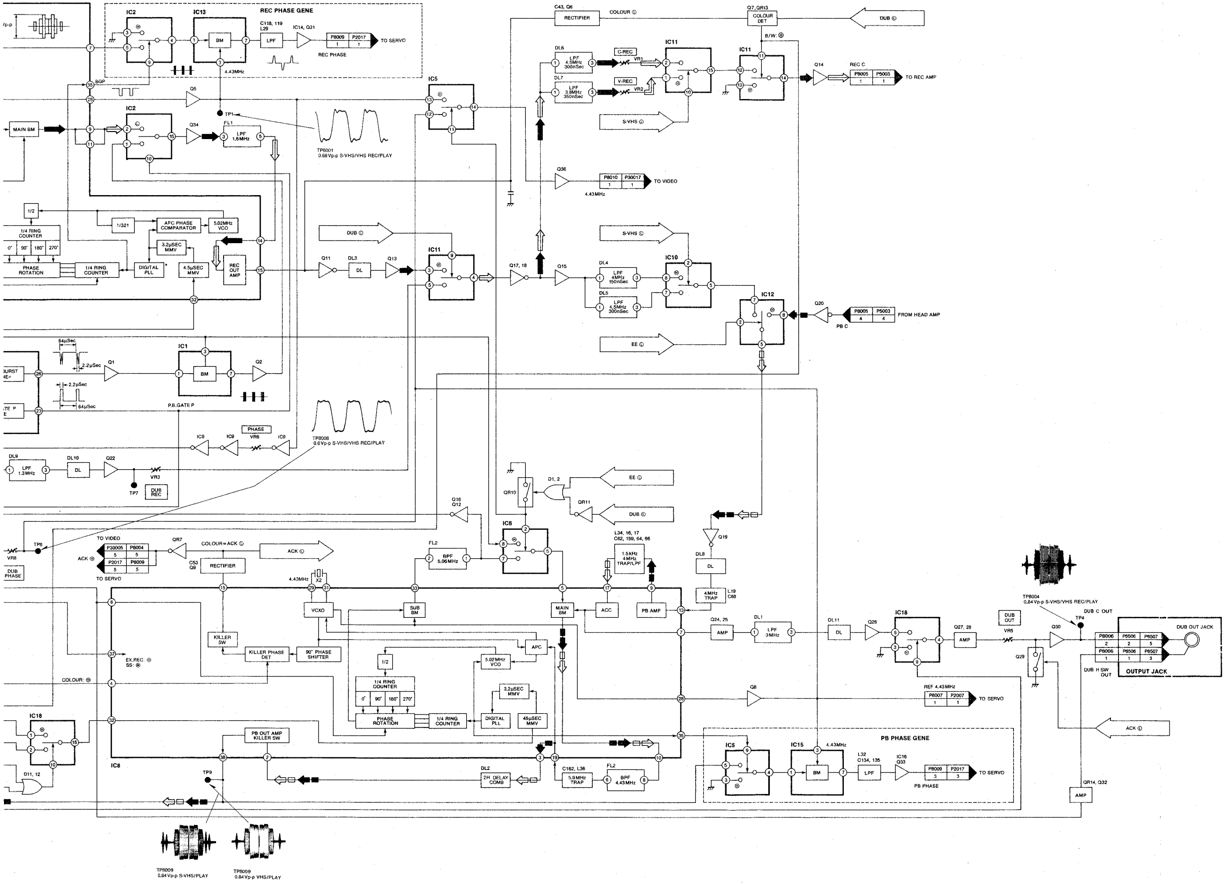

REF NO. 8000 SERIES
FROM Y/C SEP
C COMB OUT
FROM VIDEO
S-VHS ⓛ
DUB ⓗ
IC7
FL1
BPF 4.43MHz
BPF 5.06MHz
ACC
ACC DET
MAIN BM
SUB BM
VCXO
KILLER DET
1/2
1/4 RING COUNTER
PHASE ROTATION
1/4 RING COUNTER
DIGITAL PLL
1/321
AFC PHASE COMPARATOR
5.02MHz VCO
3.2μSEC MMV
4.5μSEC MMV
REC OUT AMP
X1 4.43MHz
HEAD SW
REC HSS
500mVp-p
BGP
IC2
IC13
REC PHASE GENE
BM
LPF
IC14, Q31
TO SERVO
REC PHASE
4.43MHz
Q5
Q34
LPF 1.6MHz
TP1
TP8001 0.68 Vp-p S-VHS/VHS REC/PLAY
IC3
IC4
MMV
PILOT B.GENE
PILOT BURST GENE
P.B. GATE P GENE
S-VHS Ⓗ
Y/C ⓛ
QR9
IC1
Q1
Q2
P.B.GATE P
COLOUR→Ⓗ
IC18
DUB IN JACK
DUB C IN
TP3
VIDEO MODE SW 6402 AUTO
COLOUR
B/W
INPUT JACK C.B.A.
QR8
COLOUR ⓛ
D9
D3
D10
D6
VR9
DUB LEV
Q21
DL9
LPF 1.3MHz
DL10
DL
Q22
VR3
TP7
DUB REC
PHASE VR8
IC9
TP8008 0.6 Vp-p S-VHS/VHS REC/PLAY
IC19
Q35
VR8
TP8
DUB PHASE
TO VIDEO
ACK Ⓗ
TO SERVO
QR7
COLOUR→ACK ⓛ
RECTIFIER
ACK ⓛ
QR1
QR3
QR4
QR2
Q3
SS ⓛ
EE ⓛ
QR6
D7
QR12
PB HSS
TP8006 4.8 Vp-p S-VHS/VHS REC/PLAY
COLOUR: Ⓗ
IC17
MMV
MUTE PULSE
PB MUTE
VR7
+5V
TP6
IC5
TO VIDEO
Q4
PB C
TP2
TP8002 0.6 Vp-p S-VHS/VHS/PLAY
REC HSS
E-E ⓛ
DUB ⓛ
D11, 12
IC8
EX.REC: Ⓗ SS: Ⓗ
KILLER SW
KILLER PHASE DET
90° PHASE SHIFTER
X2
4.43MHz
VCXO
SUB BM
APC
5.02MHz VCO
PB OUT AMP KILLER SW
TP9
DL2
2H DELAY COMB
C182, L36
5.9MHz TRAP
FL2
BPF 4.43MHz
TP8009 0.84 Vp-p S-VHS/PLAY
TP8009 0.84 Vp-p VHS/PLAY
C43, Q6
RECTIFIER
COLOUR ⓛ
Q7, QR13
COLOUR DET
B/W: Ⓗ
DL6
LPF 4.5MHz 300nSec
DL7
LPF 3.8MHz 350nSec
C-REC
VR1
V-REC
VR2
IC11
Q14
S-VHS ⓛ
Q38
TO VIDEO
4.43MHz
DUB ⓛ
Q11
DL3
Q13
Q17, 18
Q15
DL4
LPF 4MHz 150nSec
DL5
LPF 4.5MHz 300nSec
IC10
IC12
Q20
EE ⓛ
QR10
D1, 2
QR11
Q16 Q12
IC6
BPF 5.06MHz
L34, 16, 17 C62, 159, 64, 66
1.5kHz 4MHz TRAP/LPF
ACC
PB AMP
MAIN BM
Q19
DL8
4MHz TRAP
L19 C68
Q24, 25
AMP
DL1
LPF 3MHz
Q8
IC15

MAIN SIGNAL PATH IN REC MODE (VHS)

MAIN SIGNAL PATH IN REC MODE (S-VHS)

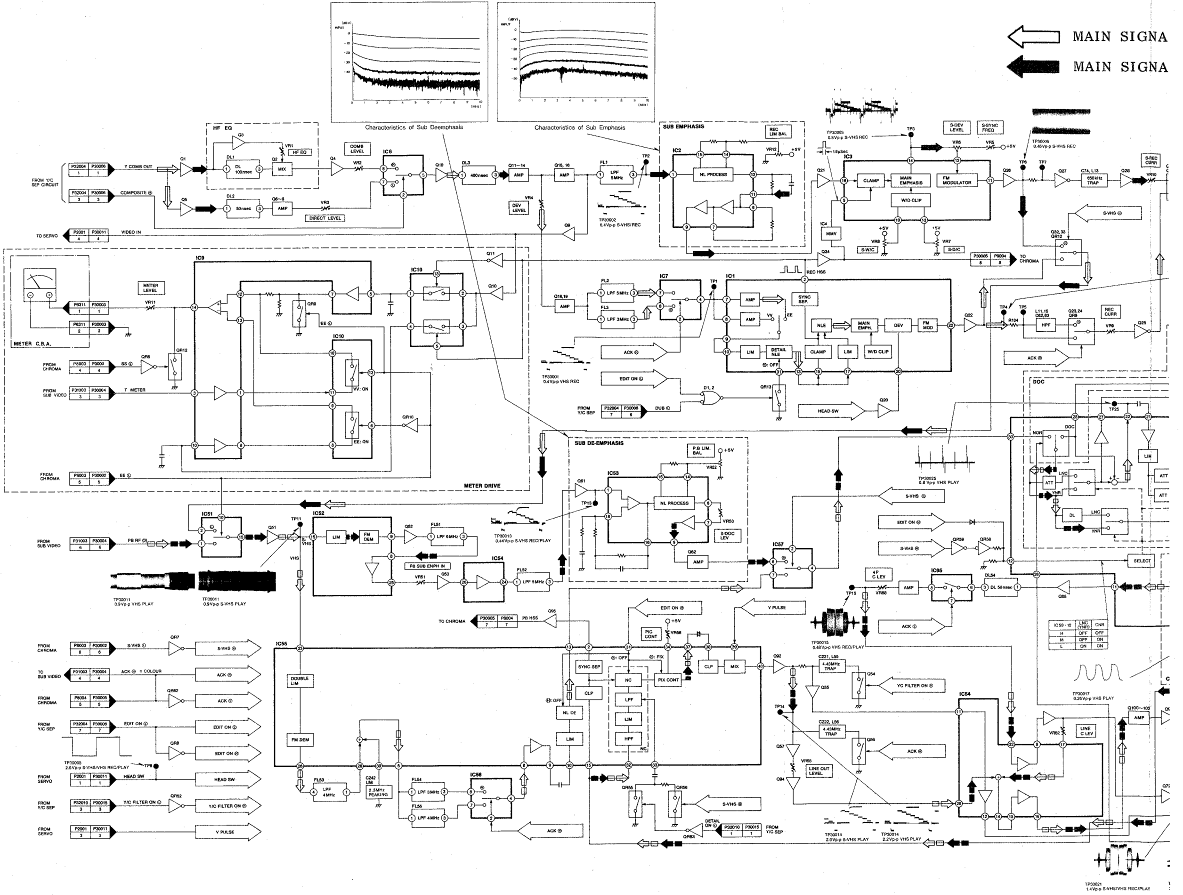
MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)



REC PHASE GENE
IC2
IC13
BM
C118, 119
L29
IC14, Q31
LPF
P8009
P2017
TO SERVO
REC PHASE
4.43MHz
BGP
Q5
MAIN BM
Q34
FL1
LPF 1.6MHz
TP1
TP6001
0.68Vp-p S-VHS/VHS REC/PLAY
IC5
C43, Q6
RECTIFIER
COLOUR ①
Q7, QR13
COLOUR DET
DUB ①
B/W: Ⓗ
DL6
LPF 4.5MHz 300nSec
C-REC
VR1
DL7
LPF 3.9MHz 350nSec
V-REC
VR2
IC11
Q14
REC C
P8005
P5003
TO REC AMP
S-VHS ①
Q36
P8010
P30017
TO VIDEO
4.43MHz
1/2
1/4 RING COUNTER
0°
90°
180°
270°
PHASE ROTATION
1/321
AFC PHASE COMPARATOR
5.02MHz VCO
3.2μSEC MMV
DIGITAL PLL
4.5μSEC MMV
REC OUT AMP
DUB ①
Q11
DL3
DL
Q13
Q17, 18
Q15
DL4
LPF 4MHz 150nSec
DL5
LPF 4.5MHz 300nSec
IC10
IC12
Q20
FROM HEAD AMP
PB C
EE ①
64μSec
2.2μSec
BURST
Q1
IC1
Q2
P.B.GATE P
IC9
PHASE
VR6
TP6008
0.6Vp-p S-VHS/VHS REC/PLAY
DL9
LPF 1.3MHz
DL10
Q22
TP7
VR3
DUB REC
QR10
D1, 2
QR11
Q16
Q12
IC8
FL2
BPF 5.06MHz
L34, 16, 17
C62, 159, 64, 66
1.5kHz 4MHz TRAP/LPF
Q19
DL8
4MHz TRAP
L19
C68
TP8
VR8
DUB PHASE
TO VIDEO
P30005
P8004
ACK Ⓗ
P2017
P8009
TO SERVO
QR7
C53
Q9
COLOUR+ACK ①
ACK ①
X2
VCXO
SUB BM
MAIN BM
ACC
PB AMP
KILLER SW
KILLER PHASE DET
90° PHASE SHIFTER
APC
1/4 RING COUNTER
PHASE ROTATION
1/4 RING COUNTER
5.02MHz VCO
3.2μSEC MMV
DIGITAL PLL
45μSEC MMV
EX.REC Ⓗ
SS: Ⓗ
COLOUR: Ⓗ
IC18
D11, 12
PB OUT AMP KILLER SW
TP9
DL2
2H DELAY COMB
C162, L36
5.9MHz TRAP
FL2
BPF 4.43MHz
Q24, 25
AMP
DL1
LPF 3MHz
DL11
Q26
IC18
Q27, 28
AMP
VR5
Q30
Q8
REF 4.43MHz
P8007
P2007
TO SERVO
PB PHASE GENE
IC5
IC15
BM
L32
C134, 135
LPF
IC16
Q33
P8009
P2017
PB PHASE
TP6004
0.84Vp-p S-VHS/VHS REC/PLAY
DUB C OUT
TP4
DUB OUT
Q29
DUB H SW OUT
P8006
P8506
P6507
DUB OUT JACK
OUTPUT JACK
ACK ①
QR14, Q32
AMP
TP6009
0.84Vp-p S-VHS/PLAY
TP6009
0.84Vp-p VHS/PLAY

VIDEO BLOCK DIAGRAM

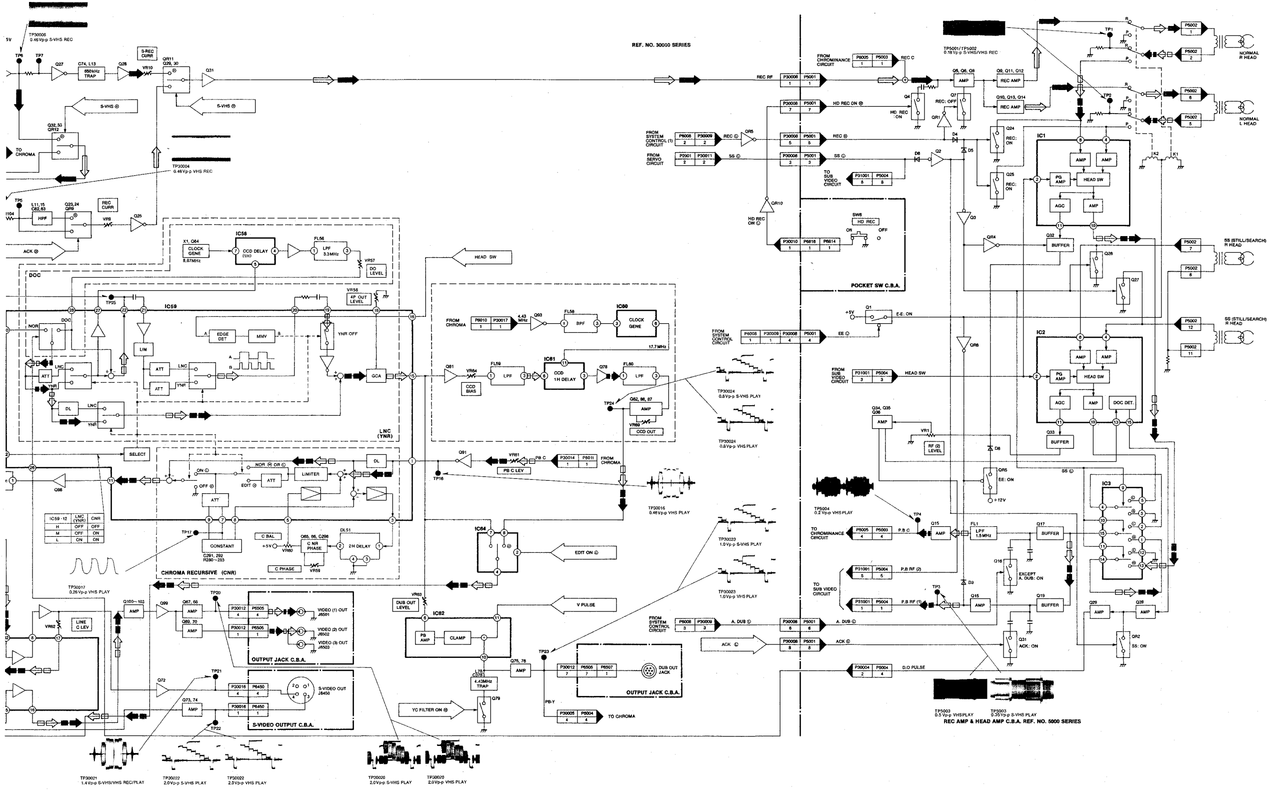

MAIN SIGNA
MAIN SIGNA
Characteristics of Sub Deemphasis
Characteristics of Sub Emphasis
HF EQ
SUB EMPHASIS
REC LIM BAL
NL PROCESS
FROM Y/C SEP CIRCUIT
Y COMB OUT
COMPOSITE
TO SERVO
VIDEO IN
DL 100nsec
MIX
50nsec
AMP
DIRECT LEVEL
COMB LEVEL
400nsec
LPF 5MHz
DEV LEVEL
TP30002 0.4Vp-p S-VHS/REC
TP30003 0.8Vp-p S-VHS REC
S-DEV LEVEL
S-SYNC FREQ
CLAMP
MAIN EMPHASIS
FM MODULATOR
W/D CLIP
S-W/C
S-D/C
TO CHROMA
650kHz TRAP
S-REC CURR
S-VHS
METER C.B.A.
METER LEVEL
METER DRIVE
FROM CHROMA
FROM SUB VIDEO
T METER
VV : ON
EE : ON
REC HSS
LPF 5MHz
LPF 3MHz
SYNC SEP.
NLE
DEV
FM MOD
DETAIL NLE
LIM
W/D CLIP
HPF
REC CURR
ACK
EDIT ON
FROM Y/C SEP
DUB
HEAD SW
TP30001 0.4Vp-p VHS REC
DOC
SUB DE-EMPHASIS
P.B LIM. BAL
S-DOC LEV
TP30013 0.44Vp-p S-VHS REC/PLAY
TP30025 0.8 Vp-p VHS PLAY
PB RF
FM DEM
LPF 6MHz
PB SUB ENPH IN
TP30011 0.9Vp-p VHS PLAY
TP30011 0.9Vp-p S-VHS PLAY
TO CHROMA
PB HSS
V PULSE
PIC CONT
SYNC SEP
CLP
NL DE
NC
PIX CONT
DOUBLE LIM
LPF 4MHz
2.3MHz PEAKING
LPF 3MHz
LPF 4MHz
4.43MHz TRAP
Y/C FILTER ON
LINE OUT LEVEL
TP30014 2.0Vp-p S-VHS PLAY
TP30014 2.2Vp-p VHS PLAY
4P C LEV
DL 50nsec
SELECT
LINE C LEV
TP30015 0.48Vp-p VHS REC/PLAY
TP30017 0.25Vp-p VHS PLAY
TP30021 1.4Vp-p S-VHS/VHS REC/PLAY
TO SUB VIDEO
ACK = COLOUR
FROM SERVO
HEAD SW
Y/C FILTER ON
TP30009 2.6Vp-p S-VHS/VHS REC/PLAY
DETAIL ON
IC59 - 12
LNC (YNR)
CNR
H
OFF
OFF
M
OFF
ON
L
ON
ON

⇦ MAIN SIGNAL PATH IN REC MODE (VHS)

⬅ MAIN SIGNAL PATH IN REC MODE (S-VHS)

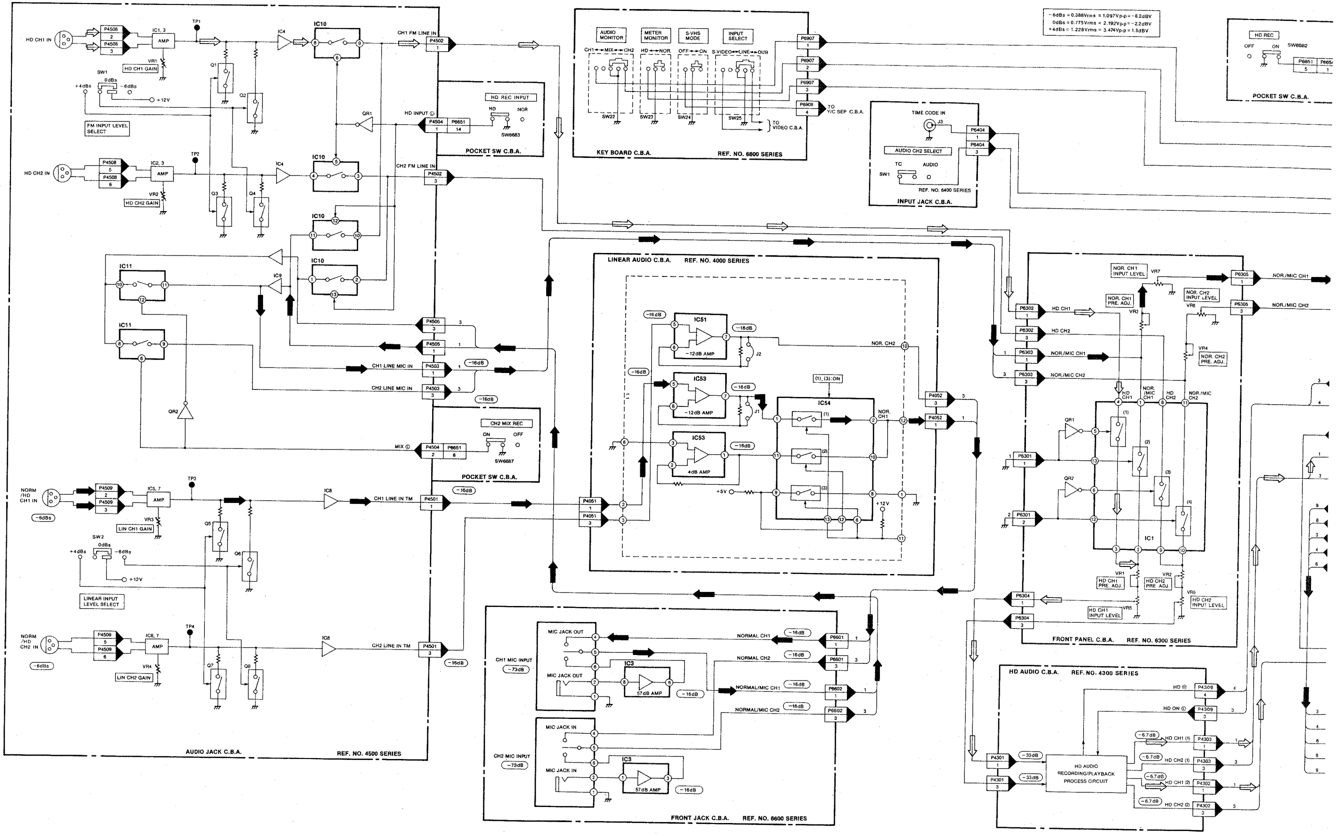
⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

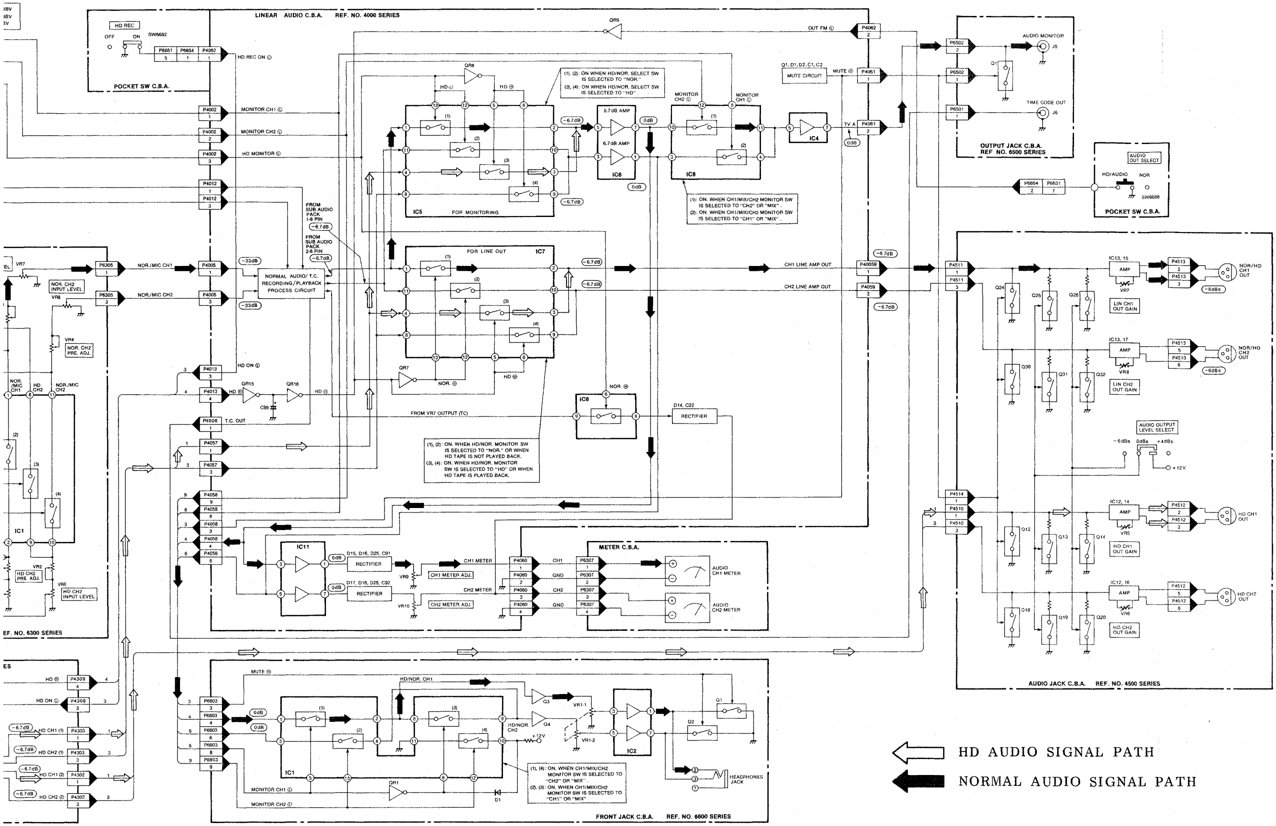
⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)


REF. NO. 30000 SERIES
TP30006 0.46Vp-p S-VHS REC
TP6
TP7
Q27
C74, L13 650kHz TRAP
Q28
S-REC CURR
VR10
QR11 Q29, 30
Q31
S-VHS ⊕
Q32, 33 QR12
TO CHROMA
TP30004 0.46Vp-p VHS REC
TP5
L11, 15 C62, 63 HPF
Q23, 24 QR9
REC CURR
VR9
Q25
ACK ⊕
X1, Q64 CLOCK GENE 8.87MHz
IC58 CCD DELAY (1H)
FL56 LPF 3.3MHz
VR57 DO LEVEL
DOC
VR58 4P OUT LEVEL
TP25
IC59
NOR
EDGE DET
MMV
LIM
ATT
LNC
YNR
YNR OFF
GCA
DL
LNC (YNR)
SELECT
Q88
ON
OFF
NOR ⊕ OR
EDIT ⊕
LIMITER
CONSTANT
C261, 262 R280~283
C BAL
Q65, 66, C298 C NR PHASE
VR59
C PHASE
DL51 2H DELAY
CHROMA RECURSIVE (CNR)
TP17
TP30017 0.26Vp-p VHS PLAY
HEAD SW
FROM CHROMA
4.43 MHz
Q93
FL58 BPF
IC60 CLOCK GENE
17.7MHz
Q81
VR64
FL59 LPF
CCD BIAS
IC61 CCD 1H DELAY
Q78
FL60 LPF
TP24
Q82, 86, 87 AMP
VR69 CCD OUT
Q91
VR61 PB C LEV
TP16
TP30016 0.46Vp-p VHS PLAY
IC64
EDIT ON ⊕
V PULSE
DUB OUT LEVEL
VR63
IC62 PB AMP CLAMP
L78 C279 4.43MHz TRAP
Q79
YC FILTER ON ⊕
Q75, 76 AMP
TP23
PB-Y
TO CHROMA
DUB OUT JACK
OUTPUT JACK C.B.A.
Q100~103 AMP
Q99
Q67, 68 AMP
Q69, 70 AMP
TP20
VIDEO (1) OUT J6501
VIDEO (2) OUT J6502
VIDEO (3) OUT J6503
VR62
LINE C LEV
Q72
Q73, 74 AMP
TP21
TP22
S-VIDEO OUT J6450
S-VIDEO OUTPUT C.B.A.
TP30021 1.4Vp-p S-VHS/VHS REC/PLAY
TP30022 2.0Vp-p S-VHS PLAY
TP30022 2.0Vp-p VHS PLAY
TP30020 2.0Vp-p S-VHS PLAY
TP30020 2.0Vp-p VHS PLAY
TP30024 0.8Vp-p S-VHS PLAY
TP30024 0.8Vp-p VHS PLAY
TP30023 1.0Vp-p S-VHS PLAY
TP30023 1.0Vp-p VHS PLAY
FROM SYSTEM CONTROL CIRCUIT
FROM SERVO CIRCUIT
FROM CHROMINANCE CIRCUIT
REC RF
REC C
HD REC ON ⊕
REC ⊕
SS ⊕
QR5
QR10
HD REC ON ⊕
TO SUB VIDEO CIRCUIT
SW6 HD REC
POCKET SW C.B.A.
EE ⊕
E-E: ON
FROM SUB VIDEO CIRCUIT
HEAD SW
A. DUB ⊕
ACK ⊕
D.O PULSE
TO CHROMINANCE CIRCUIT
TP5001/TP5002 0.18Vp-p S-VHS/VHS REC
TP1
TP2
Q5, Q6, Q8 AMP
Q9, Q11, Q12 REC AMP
Q10, Q13, Q14 REC AMP
Q4
Q7 REC: OFF
QR1
HD REC :ON
D4
D5
D6
Q2
Q24 REC: ON
Q25 REC: ON
Q3
QR4
IC1
IC2
PG AMP
HEAD SW
AGC
AMP
DOC DET.
Q32 BUFFER
Q33 BUFFER
Q26
Q27
QR6
Q34, Q35 Q36 AMP
VR1 RF (2) LEVEL
D8
QR5 EE: ON
+12V
IC3
SS ⊕
TP5004 0.2Vp-p VHS PLAY
TP4
P.B C
Q15 AMP
FL1 LPF 1.5MHz
Q17 BUFFER
Q16 EXCEPT A. DUB: ON
P.B RF (2)
P.B RF (1)
TP3
Q15 AMP
Q19 BUFFER
Q29 AMP
Q28 AMP
QR2 SS: ON
Q31 ACK: ON
D3
K1
K2
P5002
NORMAL R HEAD
NORMAL L HEAD
SS (STILL/SEARCH) R HEAD
TP5003 0.5Vp-p VHS PLAY
TP5003 0.35Vp-p S-VHS PLAY
REC AMP & HEAD AMP C.B.A. REF. NO. 5000 SERIES

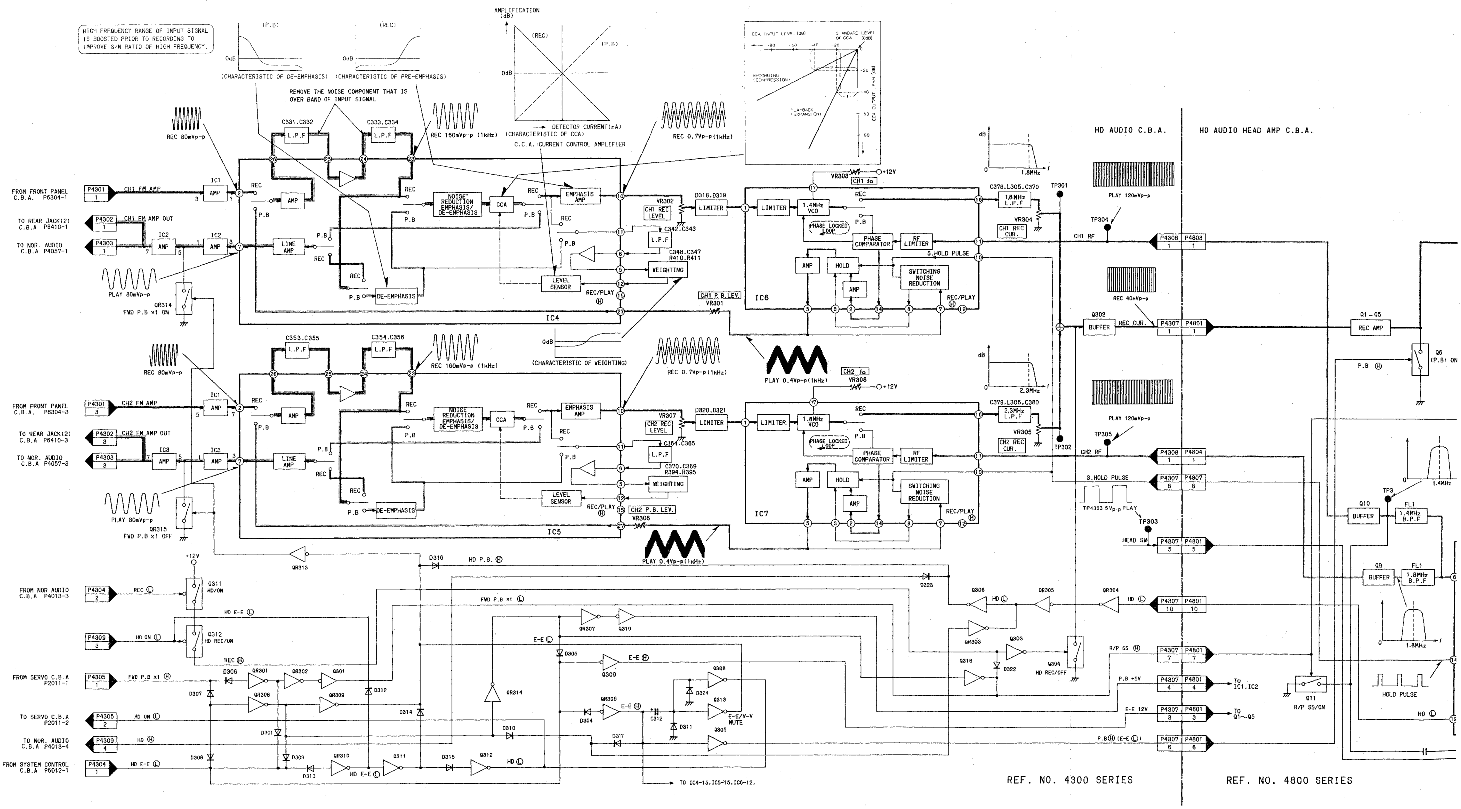
IC59 - 12	LNC (YNR)	CNR
H	OFF	OFF
M	OFF	ON
L	ON	ON

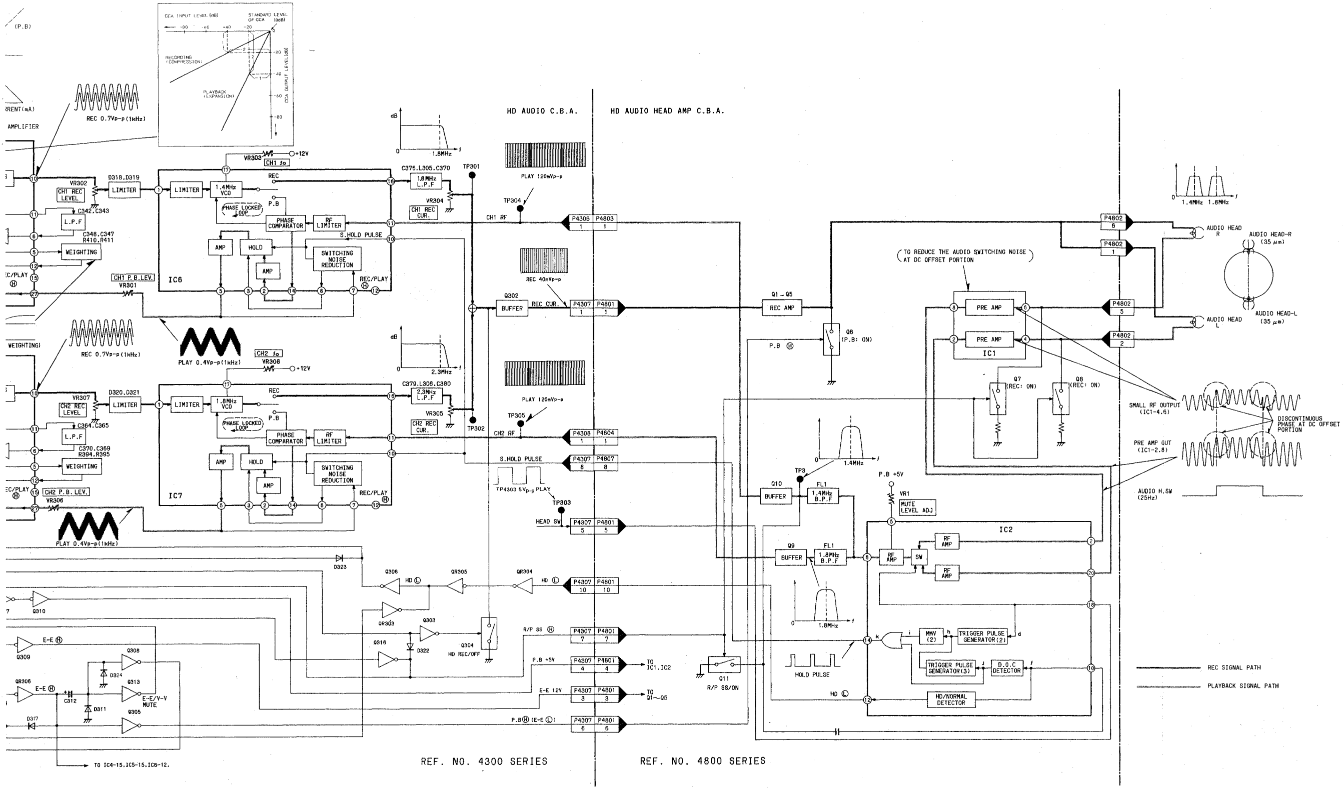
AUDIO CONTROL BLOCK DIAGRAM

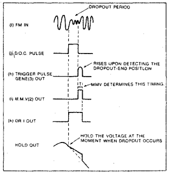

-6dBs = 0.388Vrms = 1.097Vp-p = -8.2dBV
0dBs = 0.775Vrms = 2.192Vp-p = -2.2dBV
+4dBs = 1.228Vrms = 3.474Vp-p = 1.8dBV
HD CH1 IN
HD CH2 IN
NORM /HD CH1 IN
NORM /HD CH2 IN
HD CH1 GAIN
HD CH2 GAIN
LIN CH1 GAIN
LIN CH2 GAIN
FM INPUT LEVEL SELECT
LINEAR INPUT LEVEL SELECT
CH1 FM LINE IN
CH2 FM LINE IN
HD INPUT
HD REC INPUT
POCKET SW C.B.A.
CH2 MIX REC
CH1 LINE MIC IN
CH2 LINE MIC IN
CH1 LINE IN TM
CH2 LINE IN TM
AUDIO JACK C.B.A.
REF. NO. 4500 SERIES
AUDIO MONITOR
METER MONITOR
S-VHS MODE
INPUT SELECT
KEY BOARD C.B.A.
REF. NO. 6800 SERIES
TO Y/C SEP C.B.A.
TO VIDEO C.B.A.
TIME CODE IN
AUDIO CH2 SELECT
REF. NO. 6400 SERIES
INPUT JACK C.B.A.
HD REC
LINEAR AUDIO C.B.A.
REF. NO. 4000 SERIES
-12dB AMP
4dB AMP
NOR. CH2
NOR. CH1
FRONT PANEL C.B.A.
REF. NO. 6300 SERIES
NOR./MIC CH1
NOR./MIC CH2
NOR. CH1 INPUT LEVEL
NOR. CH2 INPUT LEVEL
NOR. CH1 PRE. ADJ.
NOR. CH2 PRE. ADJ.
HD CH1 PRE. ADJ.
HD CH2 PRE. ADJ.
HD CH1 INPUT LEVEL
HD CH2 INPUT LEVEL
MIC JACK OUT
MIC JACK IN
CH1 MIC INPUT
CH2 MIC INPUT
57dB AMP
NORMAL CH1
NORMAL CH2
NORMAL/MIC CH1
NORMAL/MIC CH2
FRONT JACK C.B.A.
REF. NO. 6600 SERIES
HD AUDIO C.B.A.
REF. NO. 4300 SERIES
HD AUDIO RECORDING/PLAYBACK PROCESS CIRCUIT


LINEAR AUDIO C.B.A. REF. NO. 4000 SERIES
POCKET SW C.B.A.
HD REC
OFF
ON
SW6682
P6651
P6654
P4062
HD REC ON ①
QR9
OUT FM ⑥
P4062
Q1, D1, D2, C1, C2
MUTE CIRCUIT
MUTE ②
P4061
TV A
P4061
QR8
HD ①
HD ⑤
(1), (2): ON WHEN HD/NOR. SELECT SW IS SELECTED TO "NOR."
(3), (4): ON WHEN HD/NOR. SELECT SW IS SELECTED TO "HD".
MONITOR CH2 ①
MONITOR CH1 ①
P4002
MONITOR CH1 ①
MONITOR CH2 ①
HD MONITOR ①
P4012
IC5
FOR MONITORING
6.7dB AMP
IC6
IC8
IC4
-6.7dB
0dB
(1): ON WHEN CH1/MIX/CH2 MONITOR SW IS SELECTED TO "CH2" OR "MIX".
(2): ON WHEN CH1/MIX/CH2 MONITOR SW IS SELECTED TO "CH1" OR "MIX".
FROM SUB AUDIO PACK 1-8 PIN
FROM SUB AUDIO PACK 2-8 PIN
FOR LINE OUT
IC7
P6305
NOR./MIC CH1
NOR./MIC CH2
P4005
-33dB
NORMAL AUDIO/ T.C. RECORDING/PLAYBACK PROCESS CIRCUIT
NOR. CH2 INPUT LEVEL
VR7
VR8
VR4
NOR. CH2 PRE. ADJ.
NOR. /MIC CH1
HD CH2
NOR./MIC CH2
P4013
HD ON ①
QR15
QR16
HD ⑤
C96
QR7
NOR. ⑤
HD ⑤
NOR. ⑥
IC8
P4008
T.C. OUT
FROM VR7 OUTPUT (TC)
D14, C22
RECTIFIER
(1), (2): ON. WHEN HD/NOR. MONITOR SW IS SELECTED TO "NOR." OR WHEN HD TAPE IS NOT PLAYED BACK.
(3), (4): ON. WHEN HD/NOR. MONITOR SW IS SELECTED TO "HD" OR WHEN HD TAPE IS PLAYED BACK.
P4057
P4058
P4056
CH1 LINE AMP OUT
CH2 LINE AMP OUT
P40059
P4059
IC11
D15, D16, D25, C91
D17, D18, D25, C92
RECTIFIER
CH1 METER ADJ.
CH2 METER ADJ.
VR9
VR10
CH1 METER
CH2 METER
P4060
METER C.B.A.
CH1
GND
CH2
GND
P6307
AUDIO CH1 METER
AUDIO CH2 METER
IC1
VR2
HD CH2 PRE. ADJ.
VR6
HD CH2 INPUT LEVEL
REF. NO. 6300 SERIES
HD ⑤
HD ON ①
P4309
P4303
P4302
HD CH1 (1)
HD CH2 (1)
HD CH1 (2)
HD CH2 (2)
MUTE ⑥
HD/NOR. CH1
HD/NOR. CH2
P6603
Q3
Q4
VR1-1
VR1-2
IC2
Q1
Q2
QR1
D1
MONITOR CH1 ①
MONITOR CH2 ①
(1), (4): ON. WHEN CH1/MIX/CH2 MONITOR SW IS SELECTED TO "CH2" OR "MIX".
(2), (3): ON. WHEN CH1/MIX/CH2 MONITOR SW IS SELECTED TO "CH1" OR "MIX".
HEADPHONES JACK
FRONT JACK C.B.A. REF. NO. 6600 SERIES
P6502
P6501
AUDIO MONITOR
J5
TIME CODE OUT
J6
OUTPUT JACK C.B.A. REF. NO. 6500 SERIES
AUDIO OUT SELECT
HD/AUDIO
NOR
SW6688
P6654
P6651
POCKET SW C.B.A.
P4511
IC13, 15
AMP
P4513
NOR/HD CH1 OUT
VR7
LIN CH1 OUT GAIN
Q24
Q25
Q26
IC13, 17
NOR/HD CH2 OUT
VR8
LIN CH2 OUT GAIN
Q30
Q31
Q32
-6dBs
AUDIO OUTPUT LEVEL SELECT
-6dBs 0dBs +4dBs
+12V
P4514
P4510
IC12, 14
P4512
HD CH1 OUT
VR5
HD CH1 OUT GAIN
Q12
Q13
Q14
IC12, 16
HD CH2 OUT
VR6
HD CH2 OUT GAIN
Q18
Q19
Q20
AUDIO JACK C.B.A. REF. NO. 4500 SERIES
HD AUDIO SIGNAL PATH
NORMAL AUDIO SIGNAL PATH

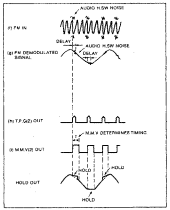
HD AUDIO BLOCK DIAGRAM


HIGH FREQUENCY RANGE OF INPUT SIGNAL IS BOOSTED PRIOR TO RECORDING TO IMPROVE S/N RATIO OF HIGH FREQUENCY.
(P.B)
(REC)
0dB
(CHARACTERISTIC OF DE-EMPHASIS)
(CHARACTERISTIC OF PRE-EMPHASIS)
REMOVE THE NOISE COMPONENT THAT IS OVER BAND OF INPUT SIGNAL
AMPLIFICATION (dB)
DETECTOR CURRENT(mA)
(CHARACTERISTIC OF CCA)
C.C.A.:CURRENT CONTROL AMPLIFIER
CCA INPUT LEVEL [dB]
STANDARD LEVEL OF CCA [0dB]
RECORDING (COMPRESSION)
PLAYBACK (EXPANSION)
CCA OUTPUT LEVEL [dB]
REC 80mVp-p
REC 160mVp-p (1kHz)
REC 0.7Vp-p(1kHz)
C331,C332
C333,C334
L.P.F
FROM FRONT PANEL C.B.A. P6304-1
TO REAR JACK(2) C.B.A P6410-1
TO NOR. AUDIO C.B.A P4057-1
P4301
P4302
P4303
CH1 FM AMP
CH1 FM AMP OUT
IC1
IC2
AMP
LINE AMP
NOISE REDUCTION EMPHASIS/ DE-EMPHASIS
CCA
EMPHASIS AMP
DE-EMPHASIS
LEVEL SENSOR
WEIGHTING
REC
P.B
REC/PLAY Ⓗ
IC4
PLAY 80mVp-p
QR314 FWD P.B ×1 ON
VR302
CH1 REC LEVEL
C342,C343
C348,C347 R410,R411
CH1 P.B.LEV.
VR301
D318,D319
LIMITER
VR303
+12V
CH1 fo
1.4MHz VCO
PHASE LOCKED LOOP
PHASE COMPARATOR
RF LIMITER
S.HOLD PULSE
HOLD
SWITCHING NOISE REDUCTION
IC6
C376,L305,C370
1.8MHz L.P.F
VR304
CH1 REC CUR.
TP301
TP304
CH1 RF
1.8MHz
HD AUDIO C.B.A.
HD AUDIO HEAD AMP C.B.A.
PLAY 120mVp-p
REC 40mVp-p
Q302
BUFFER
REC CUR.
P4306
P4803
P4307
P4801
Q1～Q5
REC AMP
Q6 (P.B: ON
P.B Ⓗ
C353,C355
C354,C356
(CHARACTERISTIC OF WEIGHTING)
PLAY 0.4Vp-p(1kHz)
CH2 fo
VR308
2.3MHz
C379,L306,C380
2.3MHz L.P.F
VR305
CH2 REC CUR.
TP302
TP305
CH2 RF
P4308
P4804
CH2 FM AMP
CH2 FM AMP OUT
FROM FRONT PANEL C.B.A. P6304-3
TO REAR JACK(2) C.B.A P6410-3
TO NOR. AUDIO C.B.A P4057-3
IC3
VR307
CH2 REC LEVEL
C364,C365
C370,C369 R394,R395
D320,D321
CH2 P.B.LEV.
VR306
IC5
IC7
QR315 FWD P.B ×1 OFF
S.HOLD PULSE
P4807
TP4303 5Vp-p PLAY
TP303
HEAD SW
TP3
Q10
FL1
1.4MHz B.P.F
1.4MHz
Q9
1.8MHz B.P.F
QR313
D316
HD P.B. Ⓗ
D323
+12V
Q311 HD/ON
FROM NOR AUDIO C.B.A P4013-3
P4304
REC Ⓛ
FWD P.B ×1 Ⓛ
HD E-E Ⓛ
QR306
QR305
QR304
HD Ⓛ
P4309
HD ON Ⓛ
Q312 HD REC/ON
QR307
Q310
QR303
Q303
E-E Ⓛ
REC Ⓗ
D305
E-E Ⓗ
Q316
D322
Q304 HD REC/OFF
R/P SS Ⓗ
FROM SERVO C.B.A P2011-1
P4305
FWD P.B ×1 Ⓗ
D306
QR301
QR302
Q301
D307
QR308
QR309
D312
Q309
QR314
Q308
D324
Q313
P.B +5V
TO IC1,IC2
Q11 R/P SS/ON
HOLD PULSE
TO SERVO C.B.A P2011-2
HD ON Ⓛ
D314
Q306
E-E Ⓗ
D304
C312
D311
E-E/V-V MUTE
Q305
E-E 12V
TO Q1～Q5
HD Ⓛ
D301
D310
D317
TO NOR. AUDIO C.B.A P4013-4
HD Ⓗ
P.BⒽ (E-E Ⓛ)
FROM SYSTEM CONTROL C.B.A P6012-1
HD E-E Ⓛ
D308
D309
D313
QR310
Q311
D315
Q312
HD E-E Ⓛ
HD Ⓛ
TO IC4-15,IC5-15,IC6-12.
REF. NO. 4300 SERIES
REF. NO. 4800 SERIES


CCA INPUT LEVEL (dB)
STANDARD LEVEL OF CCA (0dB)
RECORDING (COMPRESSION)
PLAYBACK (EXPANSION)
CCA OUTPUT LEVEL (dB)
(P.B)
AMPLIFIER
REC 0.7Vp-p (1kHz)
PLAY 0.4Vp-p (1kHz)
(WEIGHTING)
VR302
CH1 REC LEVEL
D318, D319
LIMITER
L.P.F
C342, C343
C348, C347 R410, R411
WEIGHTING
CH1 P.B.LEV.
VR301
VR303
+12V
CH1 fo
REC
1.4MHz VCO
PHASE LOCKED LOOP
P.B
PHASE COMPARATOR
RF LIMITER
S.HOLD PULSE
AMP
HOLD
SWITCHING NOISE REDUCTION
REC/PLAY
IC6
C376, L305, C370
1.8MHz L.P.F
VR304
CH1 REC CUR.
TP301
1.8MHz
2.3MHz
TP304
CH1 RF
PLAY 120mVp-p
REC 40mVp-p
Q302
BUFFER
REC CUR.
VR307
CH2 REC LEVEL
D320, D321
C364, C365
C370, C369 R394, R395
CH2 P.B. LEV.
VR306
CH2 fo
VR308
1.8MHz VCO
IC7
C379, L306, C380
2.3MHz L.P.F
VR305
CH2 REC CUR.
TP302
TP305
CH2 RF
S.HOLD PULSE
TP4303 5Vp-p PLAY
TP303
HEAD SW
D323
Q306
QR305
QR304
HD Ⓛ
Q310
QR303
Q303
Q316
D322
Q304
HD REC/OFF
R/P SS Ⓗ
P.B +5V
E-E 12V
P.B Ⓗ (E-E Ⓛ)
E-E Ⓗ
Q309
Q308
D324
Q313
QR306
C312
D311
E-E/V-V MUTE
Q305
D317
TO IC4-15, IC5-15, IC6-12.
TO IC1, IC2
TO Q1~Q5
P4306 P4803
P4307 P4801
P4308 P4804
P4307 P4807
HD AUDIO C.B.A.
HD AUDIO HEAD AMP C.B.A.
REF. NO. 4300 SERIES
REF. NO. 4800 SERIES
Q1~Q5
REC AMP
Q6 (P.B: ON)
P.B Ⓗ
TO REDUCE THE AUDIO SWITCHING NOISE AT DC OFFSET PORTION
PRE AMP
IC1
Q7 (REC: ON)
Q8 (REC: ON)
P4802
AUDIO HEAD R
AUDIO HEAD L
AUDIO HEAD-R (35 μm)
AUDIO HEAD-L (35 μm)
1.4MHz 1.8MHz
SMALL RF OUTPUT (IC1-4.6)
PRE AMP OUT (IC1-2.8)
DISCONTINUOUS PHASE AT DC OFFSET PORTION
AUDIO H.SW (25Hz)
1.4MHz
TP3
Q10
BUFFER
FL1
1.4MHz B.P.F
P.B +5V
VR1
MUTE LEVEL ADJ
IC2
Q9
1.8MHz B.P.F
RF AMP
SW
MMV (2)
TRIGGER PULSE GENERATOR (2)
TRIGGER PULSE GENERATOR (3)
D.O.C DETECTOR
HD/NORMAL DETECTOR
HOLD PULSE
HD Ⓛ
Q11
R/P SS/ON
REC SIGNAL PATH
PLAYBACK SIGNAL PATH

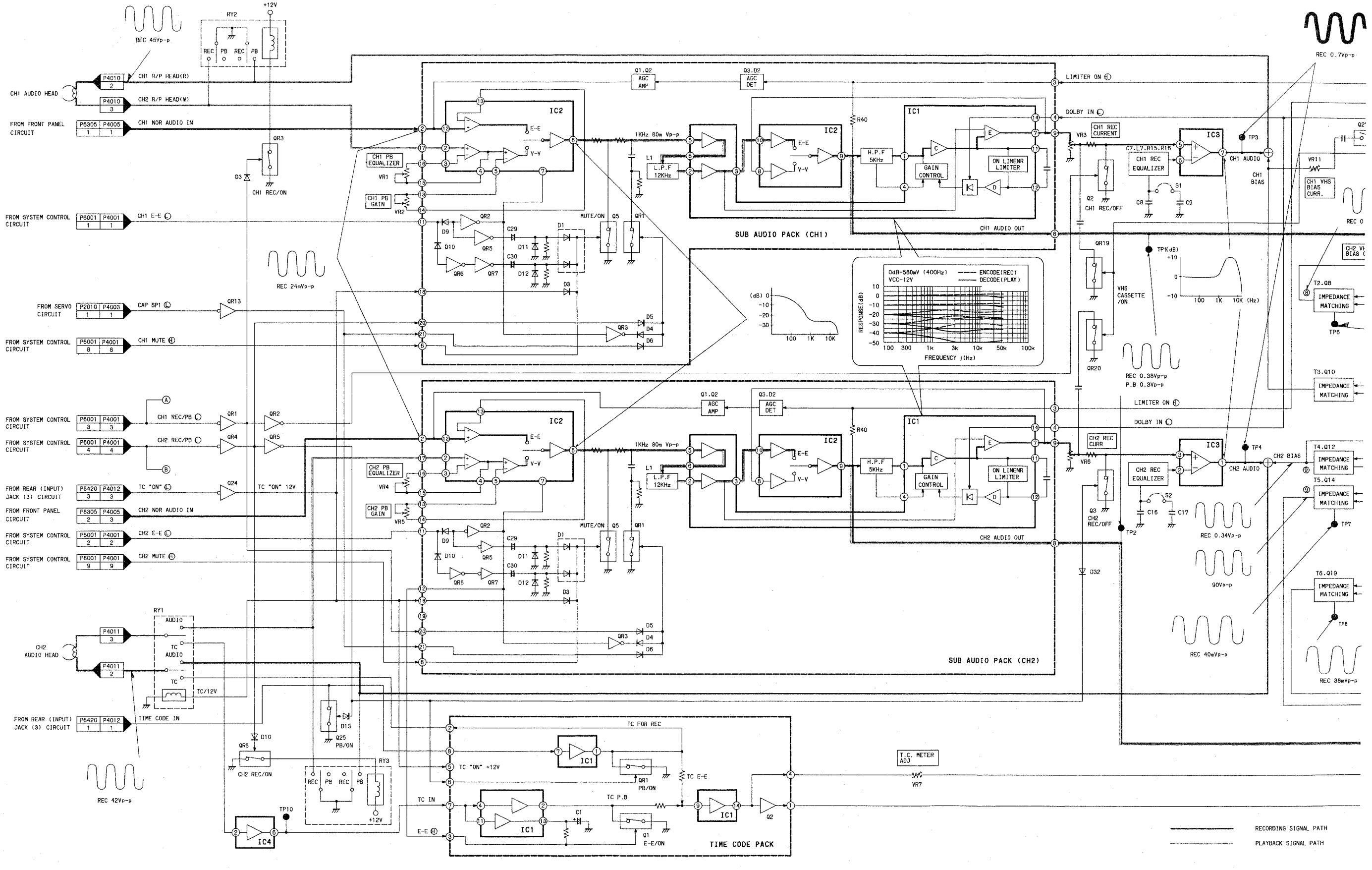

DROPOUT PERIOD
(f) FM IN
(g) D.O.C. PULSE
RISES UPON DETECTING THE DROPOUT-END POSITION
(h) TRIGGER PULSE GENE(3) OUT
MMV DETERMINES THIS TIMING
(i) M.M.V(2) OUT
(k) OR i OUT
HOLD OUT
HOLD THE VOLTAGE AT THE MOMENT WHEN DROPOUT OCCURS

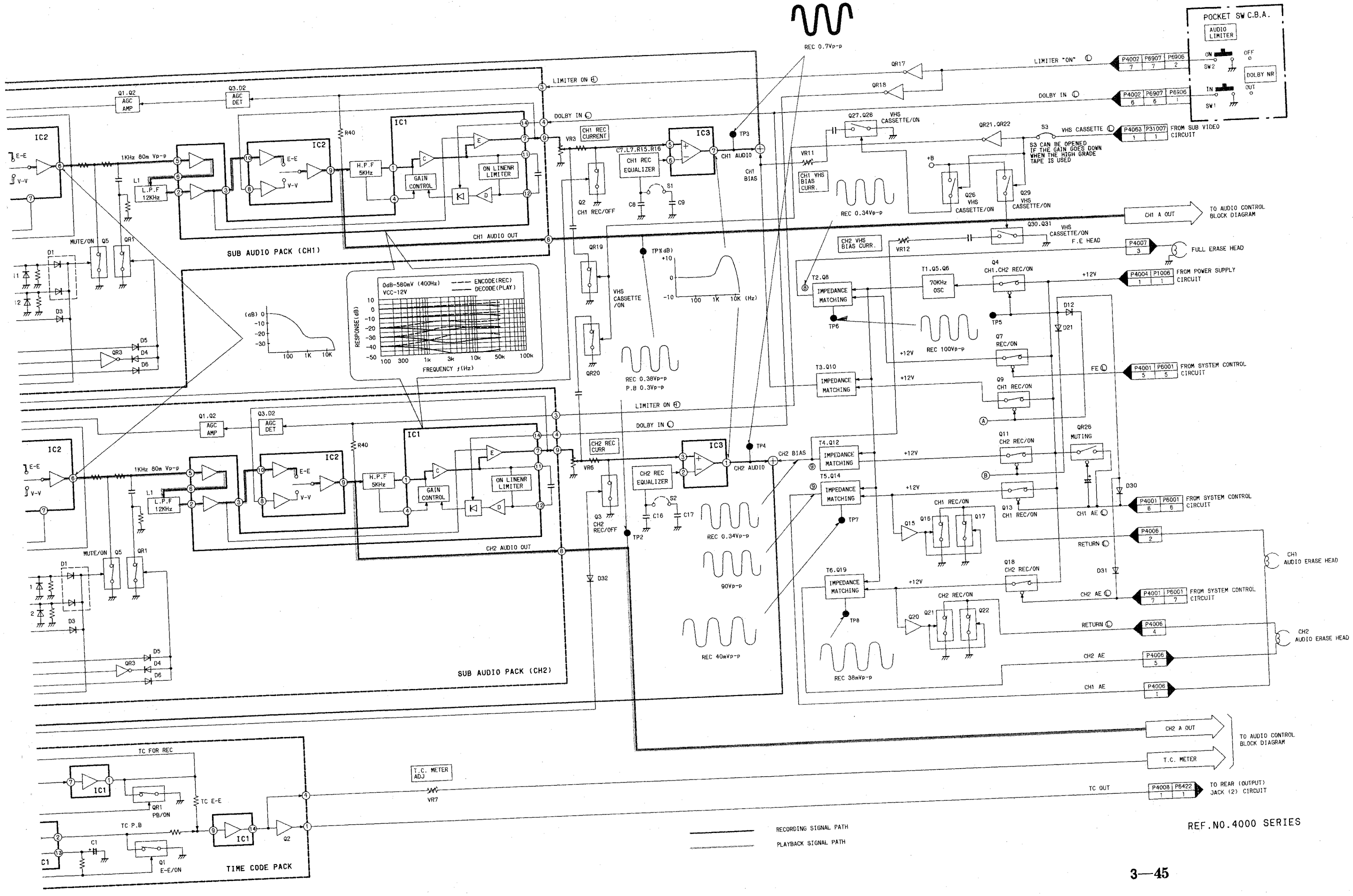
D.O.C Timing Chart


AUDIO H.SW NOISE
(f) FM IN
DELAY
(g) FM DEMODULATED SIGNAL
AUDIO H.SW NOISE
DELAY
(h) T.P.G(2) OUT
M.M.V DETERMINES TIMING
(i) M.M.V(2) OUT
HOLD
HOLD OUT

H.SW Noise Compensator Timing Chart

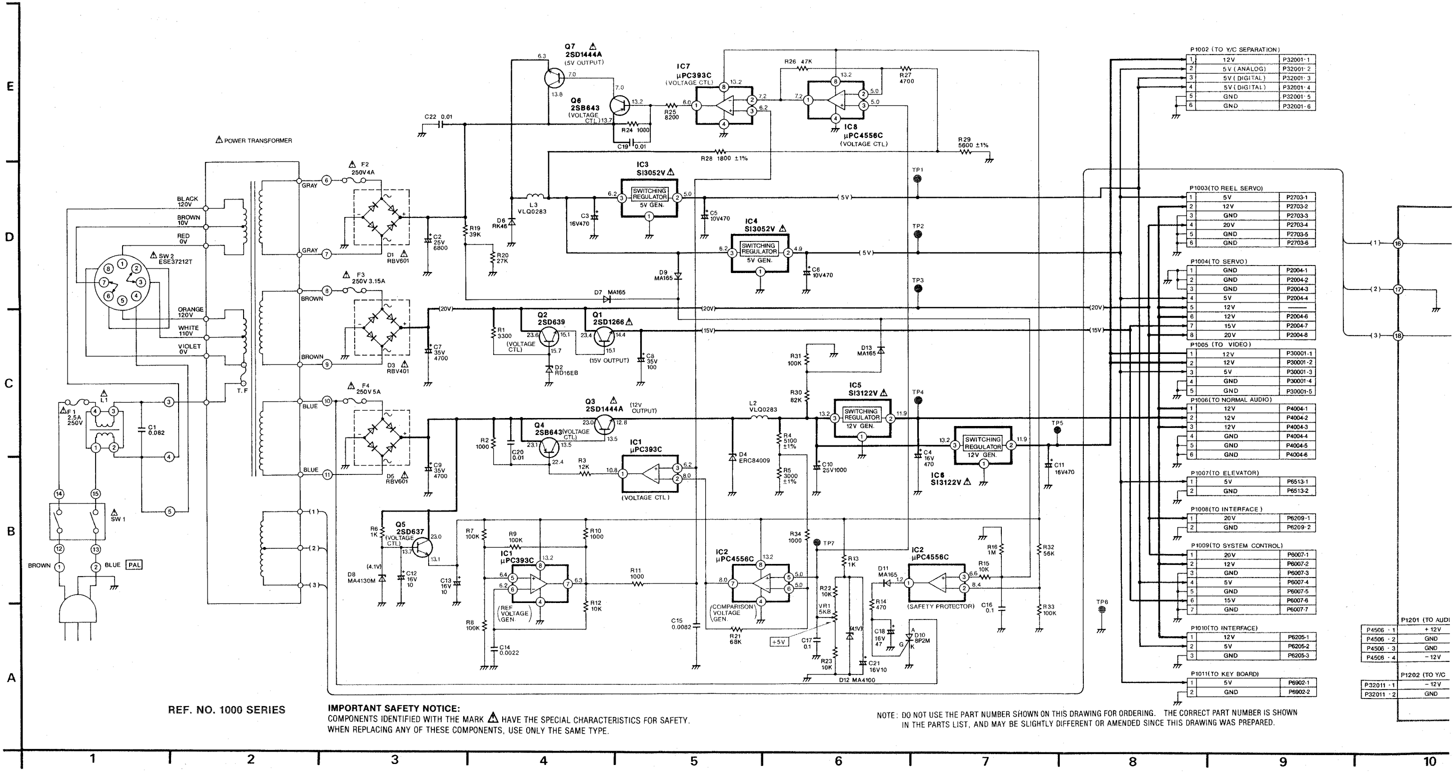
NORMAL AUDIO BLOCK DIAGRAM


REC 45Vp-p
RY2
+12V
REC PB REC PB
CH1 AUDIO HEAD
P4010
CH1 R/P HEAD(R)
CH2 R/P HEAD(W)
FROM FRONT PANEL CIRCUIT
P6305 P4005
CH1 NOR AUDIO IN
QR3
D3
CH1 REC/ON
FROM SYSTEM CONTROL CIRCUIT
P6001 P4001
CH1 E-E
FROM SERVO CIRCUIT
P2010 P4003
CAP SP1
QR13
CH1 MUTE
REC 24mVp-p
Q1.Q2 AGC AMP
Q3.D2 AGC DET
IC2
E-E
V-V
CH1 PB EQUALIZER
VR1
CH1 PB GAIN
VR2
1KHz 80m Vp-p
L1
L.P.F 12KHz
R40
IC1
H.P.F 5KHz
GAIN CONTROL
ON LINENR LIMITER
D9 D10 QR2 QR5 QR6 QR7
C29 C30 D11 D12 D1 D3 D4 D5 D6
MUTE/ON Q5 QR1
SUB AUDIO PACK (CH1)
CH1 AUDIO OUT
LIMITER ON
DOLBY IN
CH1 REC CURRENT
VR3
C7.L7.R15.R16
CH1 REC EQUALIZER
IC3
TP3
CH1 AUDIO
CH1 BIAS
VR11
CH1 VHS BIAS CURR.
S1
C8 C9
Q2 CH1 REC/OFF
QR19
QR20
VHS CASSETTE /ON
TP(dB)
(dB)
100 1K 10K (Hz)
0dB=580mV (400Hz)
VCC-12V
ENCODE(REC)
DECODE(PLAY)
RESPONSE(dB)
FREQUENCY f(Hz)
REC 0.36Vp-p
P.B 0.3Vp-p
REC 0.7Vp-p
T2.Q8 IMPEDANCE MATCHING
TP6
T3.Q10 IMPEDANCE MATCHING
CH1 REC/PB
CH2 REC/PB
QR1 QR2 QR4 QR5
FROM REAR (INPUT) JACK (3) CIRCUIT
P6420 P4012
TC "ON"
Q24
TC "ON" 12V
CH2 NOR AUDIO IN
CH2 E-E
CH2 MUTE
CH2 PB EQUALIZER
VR4
CH2 PB GAIN
VR5
SUB AUDIO PACK (CH2)
CH2 AUDIO OUT
CH2 REC CURR
VR6
CH2 REC EQUALIZER
S2
C16 C17
Q3 CH2 REC/OFF
TP2
TP4
CH2 AUDIO
CH2 BIAS
T4.Q12 IMPEDANCE MATCHING
T5.Q14 IMPEDANCE MATCHING
TP7
T6.Q19 IMPEDANCE MATCHING
TP8
REC 0.34Vp-p
90Vp-p
REC 40mVp-p
REC 38mVp-p
D32
RY1
AUDIO
TC
TC/12V
CH2 AUDIO HEAD
P4011
TIME CODE IN
REC 42Vp-p
D13
Q25 PB/ON
D10
QR6
CH2 REC/ON
RY3
TP10
IC4
TC FOR REC
TC "ON" +12V
QR1 PB/ON
TC E-E
TC IN
TC P.B
C1
Q1 E-E/ON
E-E
Q2
TIME CODE PACK
T.C. METER ADJ
VR7
RECORDING SIGNAL PATH
PLAYBACK SIGNAL PATH


REC 0.7Vp-p
POCKET SW C.B.A.
AUDIO LIMITER
ON OFF SW2
DOLBY NR
IN OUT SW1
LIMITER "ON"
DOLBY IN
P4002 P6907 P6906
LIMITER ON
DOLBY IN
QR17
QR18
Q1.Q2 AGC AMP
Q3.Q2 AGC DET
IC2
E-E
V-V
1KHz 80m Vp-p
L1
L.P.F 12KHz
R40
IC1
H.P.F 5KHz
GAIN CONTROL
ON LINENR LIMITER
E
C
D
CH1 AUDIO OUT
SUB AUDIO PACK (CH1)
MUTE/ON Q5 QR1
D1 D3 D4 D5 D6 QR3
VR3
CH1 REC CURRENT
C7.L7.R15.R16
CH1 REC EQUALIZER
IC3
TP3
CH1 AUDIO
CH1 BIAS
Q2 CH1 REC/OFF
C8 S1 C9
Q27.Q28 VHS CASSETTE/ON
QR21.QR22
S3 VHS CASSETTE
S3 CAN BE OPENED IF THE GAIN GOES DOWN WHEN THE HIGH GRADE TAPE IS USED
P4063 P31007 FROM SUB VIDEO CIRCUIT
VR11
CH1 VHS BIAS CURR.
+B
Q26 VHS CASSETTE/ON
Q29 VHS CASSETTE/ON
REC 0.34Vp-p
CH1 A OUT
TO AUDIO CONTROL BLOCK DIAGRAM
Q30.Q31 VHS CASSETTE/ON
CH2 VHS BIAS CURR.
VR12
F.E HEAD
P4007
FULL ERASE HEAD
(dB) 0 -10 -20 -30 100 1K 10K
0dB=580mV (400Hz) VCC=12V
ENCODE(REC) DECODE(PLAY)
RESPONSE(dB) 10 0 -10 -20 -30 -40 -50
100 300 1k 3k 10k 50k 100k
FREQUENCY f(Hz)
QR19
VHS CASSETTE /ON
QR20
TP (dB) +10 0 -10 100 1K 10K (Hz)
REC 0.38Vp-p P.B 0.3Vp-p
T2.Q8 IMPEDANCE MATCHING
T1.Q5.Q6 70KHz OSC
Q4 CH1.CH2 REC/ON
+12V
P4004 P1006 FROM POWER SUPPLY CIRCUIT
TP6
REC 100Vp-p
TP5
D12 D21
Q7 REC/ON
FE
P4001 P6001 FROM SYSTEM CONTROL CIRCUIT
T3.Q10 IMPEDANCE MATCHING
Q9 CH1 REC/ON
QR26 MUTING
Q11 CH2 REC/ON
D30
P4001 P6001 FROM SYSTEM CONTROL CIRCUIT
CH1 AE
Q13 CH1 REC/ON
Q15 Q16 Q17
RETURN
P4006
CH1 AUDIO ERASE HEAD
D31
Q18 CH2 REC/ON
CH2 AE
P4001 P6001 FROM SYSTEM CONTROL CIRCUIT
Q20 Q21 Q22
CH2 AUDIO ERASE HEAD
CH2 AE
CH1 AE
TP8
REC 38mVp-p
LIMITER ON
DOLBY IN
CH2 REC CURR
TP4
CH2 BIAS
T4.Q12 IMPEDANCE MATCHING
T5.Q14 IMPEDANCE MATCHING
TP7
T6.Q19 IMPEDANCE MATCHING
CH2 AUDIO
VR6
CH2 REC EQUALIZER
S2 C16 C17
Q3 CH2 REC/OFF
TP2
REC 0.34Vp-p
90Vp-p
REC 40mVp-p
D32
CH2 AUDIO OUT
SUB AUDIO PACK (CH2)
CH2 A OUT
T.C. METER
TO AUDIO CONTROL BLOCK DIAGRAM
T.C. METER ADJ
VR7
TC OUT
P4008 P6422
TO REAR (OUTPUT) JACK (2) CIRCUIT
TC FOR REC
IC1
QR1 PB/ON
TC E-E
TC P.B
C1
Q1 E-E/ON
Q2
TIME CODE PACK
RECORDING SIGNAL PATH
PLAYBACK SIGNAL PATH

REF.NO.4000 SERIES

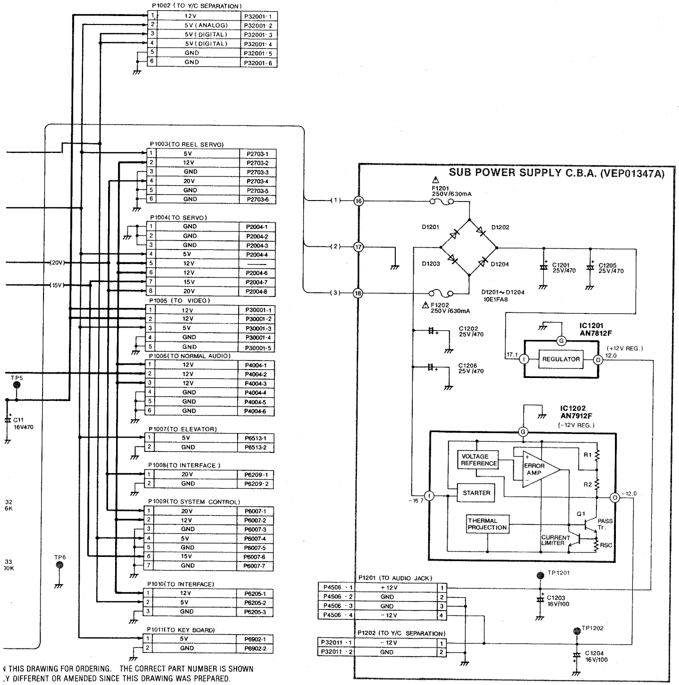
POWER SUPPLY SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
POWER TRANSFORMER
BLACK 120V
BROWN 10V
RED 0V
ORANGE 120V
WHITE 110V
VIOLET 0V
T. F
SW 2 ESE37212T
F 1 2.5A 250V
L1
C1 0.082
SW 1
BROWN
BLUE
PAL
F2 250V4A
F3 250V 3.15A
F4 250V 5A
GRAY
BROWN
BLUE
D1 RBV601
D3 RBV401
D5 RBV601
C2 25V 6800
C7 35V 4700
C9 35V 4700
Q7 2SD1444A (5V OUTPUT)
Q6 2SB643 (VOLTAGE CTL)
C22 0.01
R24 1000
C19 0.01
R25 8200
IC7 μPC393C (VOLTAGE CTL)
R26 47K
R27 4700
IC8 μPC4556C (VOLTAGE CTL)
R28 1800 ±1%
R29 5600 ±1%
IC3 SI3052V SWITCHING REGULATOR 5V GEN.
IC4 SI3052V SWITCHING REGULATOR 5V GEN.
L3 VLQ0283
D6 RK46
R19 39K
R20 27K
C3 16V470
C5 10V470
C6 10V470
D9 MA165
D7 MA165
TP1
TP2
TP3
TP4
TP5
TP6
TP7
(5V)
(20V)
(15V)
Q2 2SD639
Q1 2SD1266
R1 3300
(VOLTAGE CTL)
D2 RD16EB
C8 35V 100
(15V OUTPUT)
Q3 2SD1444A (12V OUTPUT)
Q4 2SB643 (VOLTAGE CTL)
R2 1000
C20 0.01
R3 12K
IC1 μPC393C (VOLTAGE CTL)
R31 100K
D13 MA165
R30 82K
L2 VLQ0283
IC5 SI3122V SWITCHING REGULATOR 12V GEN.
IC6 SI3122V SWITCHING REGULATOR 12V GEN.
R4 5100 ±1%
R5 3000 ±1%
D4 ERC84009
C10 25V1000
C4 16V 470
C11 16V470
Q5 2SD637 (VOLTAGE CTL)
R6 1K
D8 MA4130M
C12 16V 10
C13 16V 10
R7 100K
R9 100K
R10 1000
IC1 μPC393C
R11 1000
R12 10K
R8 100K
C14 0.0022
(REF VOLTAGE GEN.)
C15 0.0082
IC2 μPC4556C
(COMPARISON VOLTAGE GEN.)
R21 68K
R34 1000
R13 1K
R22 10K
VR1 5KB
R23 10K
C17 0.1
+5V
(4.1V)
D11 MA165
R14 470
C18 16V 47
C21 16V10
D10 8P2M
D12 MA4100
IC2 μPC4556C
(SAFETY PROTECTOR)
R16 1M
R15 10K
C16 0.1
R32 56K
R33 100K
P1002 (TO Y/C SEPARATION)
1 12V P32001-1
2 5V (ANALOG) P32001-2
3 5V (DIGITAL) P32001-3
4 5V (DIGITAL) P32001-4
5 GND P32001-5
6 GND P32001-6
P1003 (TO REEL SERVO)
1 5V P2703-1
2 12V P2703-2
3 GND P2703-3
4 20V P2703-4
5 GND P2703-5
6 GND P2703-6
P1004 (TO SERVO)
1 GND P2004-1
2 GND P2004-2
3 GND P2004-3
4 5V P2004-4
5 12V
6 12V P2004-6
7 15V P2004-7
8 20V P2004-8
P1005 (TO VIDEO)
1 12V P30001-1
2 12V P30001-2
3 5V P30001-3
4 GND P30001-4
5 GND P30001-5
P1006 (TO NORMAL AUDIO)
1 12V P4004-1
2 12V P4004-2
3 12V P4004-3
4 GND P4004-4
5 GND P4004-5
6 GND P4004-6
P1007 (TO ELEVATOR)
1 5V P6513-1
2 GND P6513-2
P1008 (TO INTERFACE)
1 20V P6209-1
2 GND P6209-2
P1009 (TO SYSTEM CONTROL)
1 20V P6007-1
2 12V P6007-2
3 GND P6007-3
4 5V P6007-4
5 GND P6007-5
6 15V P6007-6
7 GND P6007-7
P1010 (TO INTERFACE)
1 12V P6205-1
2 5V P6205-2
3 GND P6205-3
P1011 (TO KEY BOARD)
1 5V P6902-1
2 GND P6902-2
P1201 (TO AUDI
P4506-1 +12V
P4506-2 GND
P4506-3 GND
P4506-4 -12V
P1202 (TO Y/C
P32011-1 -12V
P32011-2 GND

REF. NO. 1000 SERIES

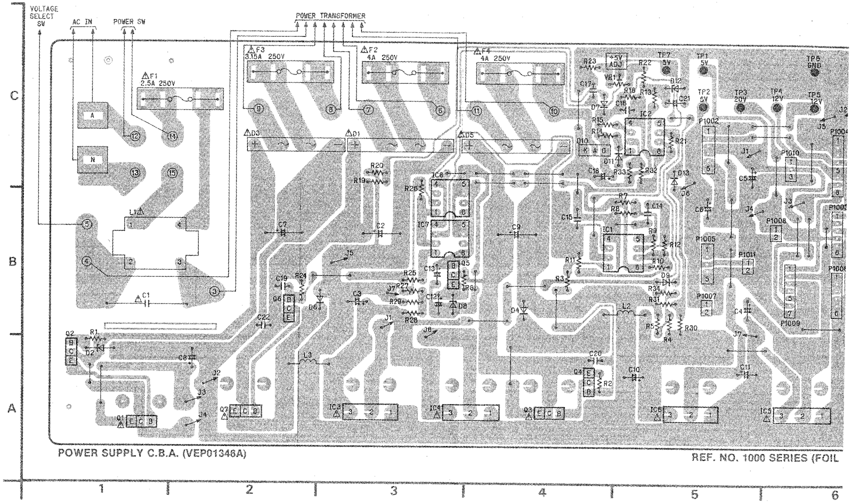
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

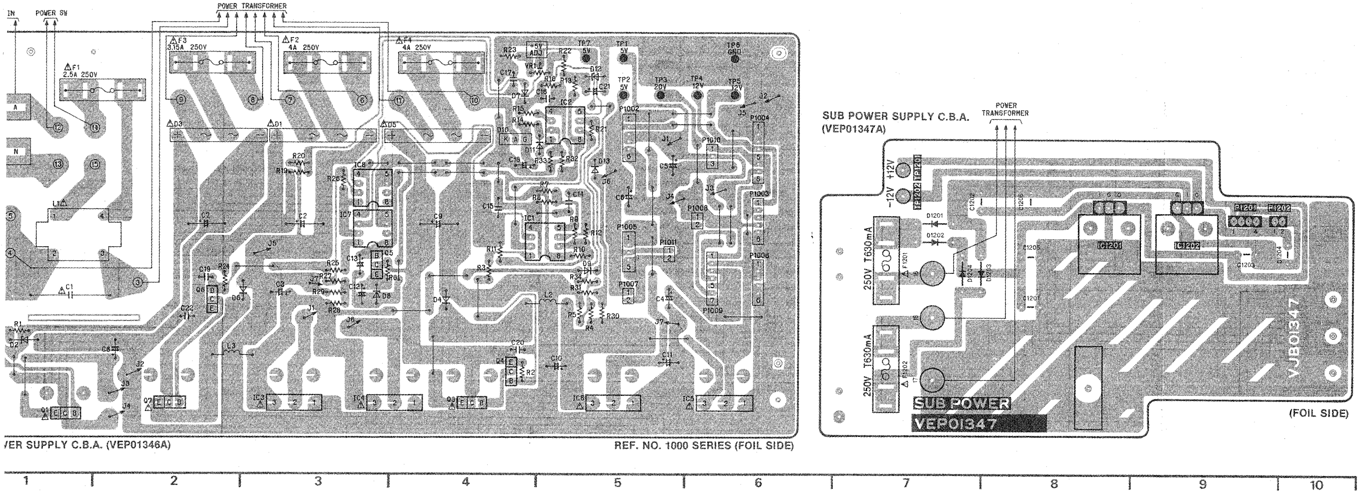

P1002 (TO Y/C SEPARATION)
1 12V P32001-1
2 5V (ANALOG) P32001-2
3 5V (DIGITAL) P32001-3
4 5V (DIGITAL) P32001-4
5 GND P32001-5
6 GND P32001-6
P1003(TO REEL SERVO)
1 5V P2703-1
2 12V P2703-2
3 GND P2703-3
4 20V P2703-4
5 GND P2703-5
6 GND P2703-6
P1004(TO SERVO)
1 GND P2004-1
2 GND P2004-2
3 GND P2004-3
4 5V P2004-4
5 12V
6 12V P2004-6
7 15V P2004-7
8 20V P2004-8
P1005 (TO VIDEO)
1 12V P30001-1
2 12V P30001-2
3 5V P30001-3
4 GND P30001-4
5 GND P30001-5
P1006(TO NORMAL AUDIO)
1 12V P4004-1
2 12V P4004-2
3 12V P4004-3
4 GND P4004-4
5 GND P4004-5
6 GND P4004-6
P1007(TO ELEVATOR)
1 5V P6513-1
2 GND P6513-2
P1008(TO INTERFACE)
1 20V P6209-1
2 GND P6209-2
P1009(TO SYSTEM CONTROL)
1 20V P6007-1
2 12V P6007-2
3 GND P6007-3
4 5V P6007-4
5 GND P6007-5
6 15V P6007-6
7 GND P6007-7
P1010(TO INTERFACE)
1 12V P6205-1
2 5V P6205-2
3 GND P6205-3
P1011(TO KEY BOARD)
1 5V P6902-1
2 GND P6902-2
(20V)
(15V)
TP5
C11 16V470
32 6K
33 0K
TP6
SUB POWER SUPPLY C.B.A. (VEP01347A)
F1201 250V/630mA
F1202 250V/630mA
D1201 D1202 D1203 D1204
D1201~D1204 10E1FA8
C1201 25V/470
C1205 25V/470
C1202 25V/470
C1206 25V/470
IC1201 AN7812F
REGULATOR
(+12V REG.)
17.1 12.0
IC1202 AN7912F
(-12V REG.)
VOLTAGE REFERENCE
ERROR AMP
STARTER
THERMAL PROJECTION
CURRENT LIMITER
PASS Tr.
RSC
R1 R2 Q1
-16.7 -12.0
TP1201 C1203 16V/100
TP1202 C1204 16V/100
P1201 (TO AUDIO JACK)
P4506-1 +12V 1
P4506-2 GND 2
P4506-3 GND 3
P4506-4 -12V 4
P1202 (TO Y/C SEPARATION)
P32011-1 -12V 1
P32011-2 GND 2
8 9 10 11

THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
Y DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

POWER SUPPLY C.B.A. (VEP01346A)


VOLTAGE SELECT SW
AC IN
POWER SW
POWER TRANSFORMER
F3 3.15A 250V
F2 4A 250V
F4 4A 250V
F1 2.5A 250V
D3 D1 D5
L1 C1 C2 C7 C9
IC1 IC2 IC3 IC4 IC5 IC6 IC7 IC8
Q1 Q2 Q3 Q4 Q5 Q6 Q7
TP1 5V TP2 5V TP3 20V TP4 12V TP5 12V TP6 GND TP7 5V
VR1 +5V ADJ
P1002 P1005 P1007 P1008 P1009 P1010 P1011
J1 J2 J3 J4 J5 J6 J7
POWER SUPPLY C.B.A. (VEP01346A)
REF. NO. 1000 SERIES (FOIL
A B C
1 2 3 4 5 6

ꞁ SUPPLY C.B.A. (VEP01346A)


IN
POWER SW
POWER TRANSFORMER
F1 2.5A 250V
F3 3.15A 250V
F2 4A 250V
F4 4A 250V
D3
D1
D5
L1
C1
C7
C2
C9
IC8
IC7
IC1
IC2
+5V ADJ
VR1
TP7 5V
TP1 5V
TP2 5V
TP3 20V
TP4 12V
TP5 12V
TP6 GND
P1002
P1003
P1004
P1005
P1006
P1007
P1008
P1009
P1010
P1011
IC3
IC4
IC5
IC6
Q1
Q4
Q6
Q7
Q3
L2
L3
POWER TRANSFORMER
-12V
+12V
TP1202
TP1201
D1201
D1202
D1203
D1204
C1202
C1203
C1205
C1206
C1201
IC1201
IC1202
P1201
P1202
250V T630mA
F1201
F1202
SUB POWER
VEP01347
VJB01347
1
2
3
4
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8
9
10

/ER SUPPLY C.B.A. (VEP01346A)

REF. NO. 1000 SERIES (FOIL SIDE)

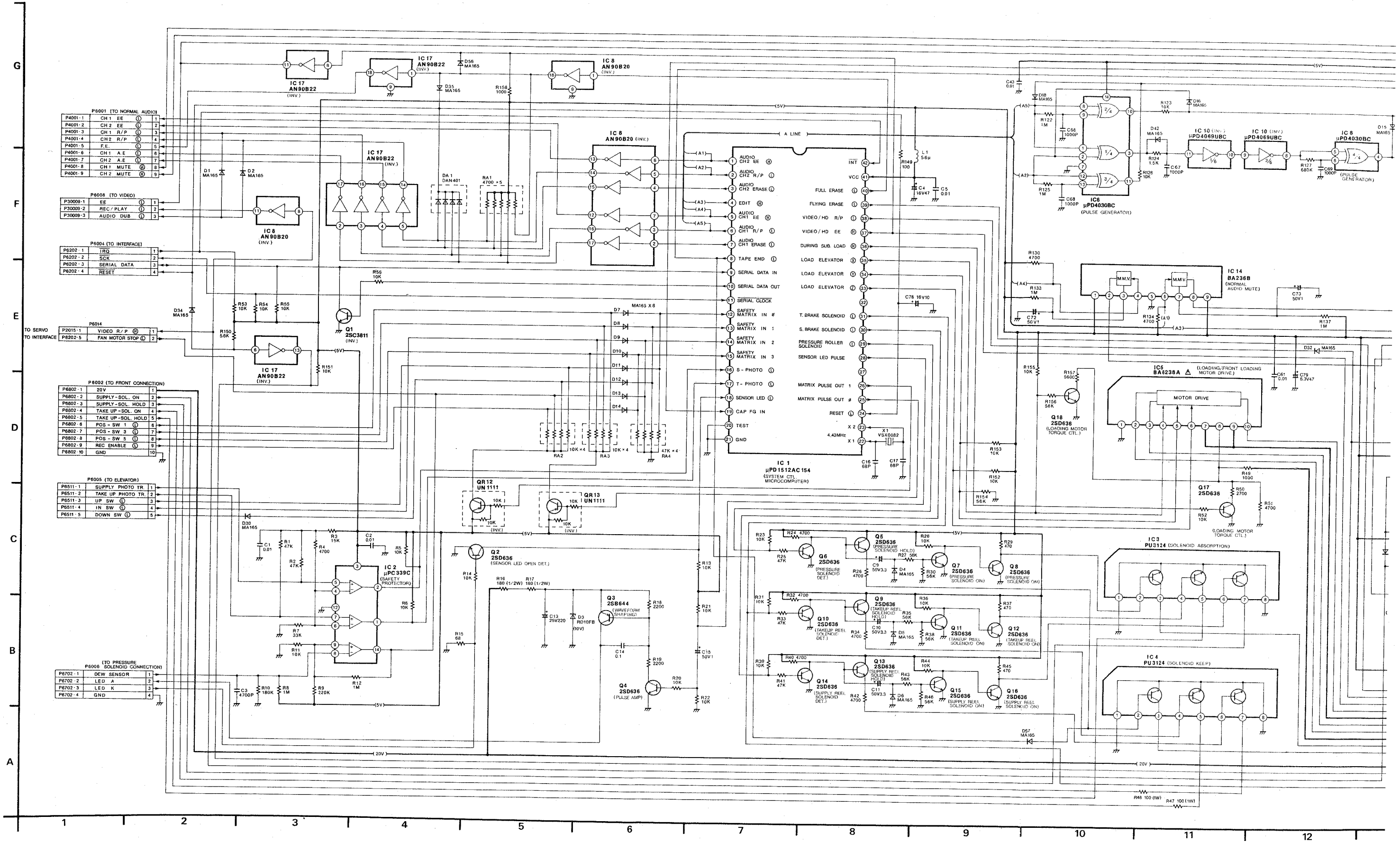
SUB POWER SUPPLY C.B.A.
(VEP01347A)

(FOIL SIDE)

Power Supply & Sub Power Supply C.B.A.	
Transistor	
Q1001	A-1
Q1002	A-1
Q1003	A-4
Q1004	A-4
Q1005	B-3
Q1006	B-2
Q1007	A-2
Integrated Circuit	
IC1001	B-5
IC1002	C-5
IC1003	A-3
IC1004	A-3
IC1005	A-6
IC1006	A-5
IC1007	B-3
IC1008	C-3
IC1201	B-8
IC1202	B-9
Test Point	
TP1001	C-5
TP1002	C-5
TP1003	C-5
TP1004	C-6
TP1005	C-6
TP1006 (GND)	C-6
TP1007	C-5
TP1201	C-7
TP1202	B-7
Adjustment	
VR1001	C-4
Connector	
P1002	C-5
P1003	B-6
P1004	C-6
P1005	B-5
P1006	B-6
P1007	B-5
P1008	B-6
P1009	B-6
P1010	C-6
P1011	B-5
P1201	B-9
P1202	B-10

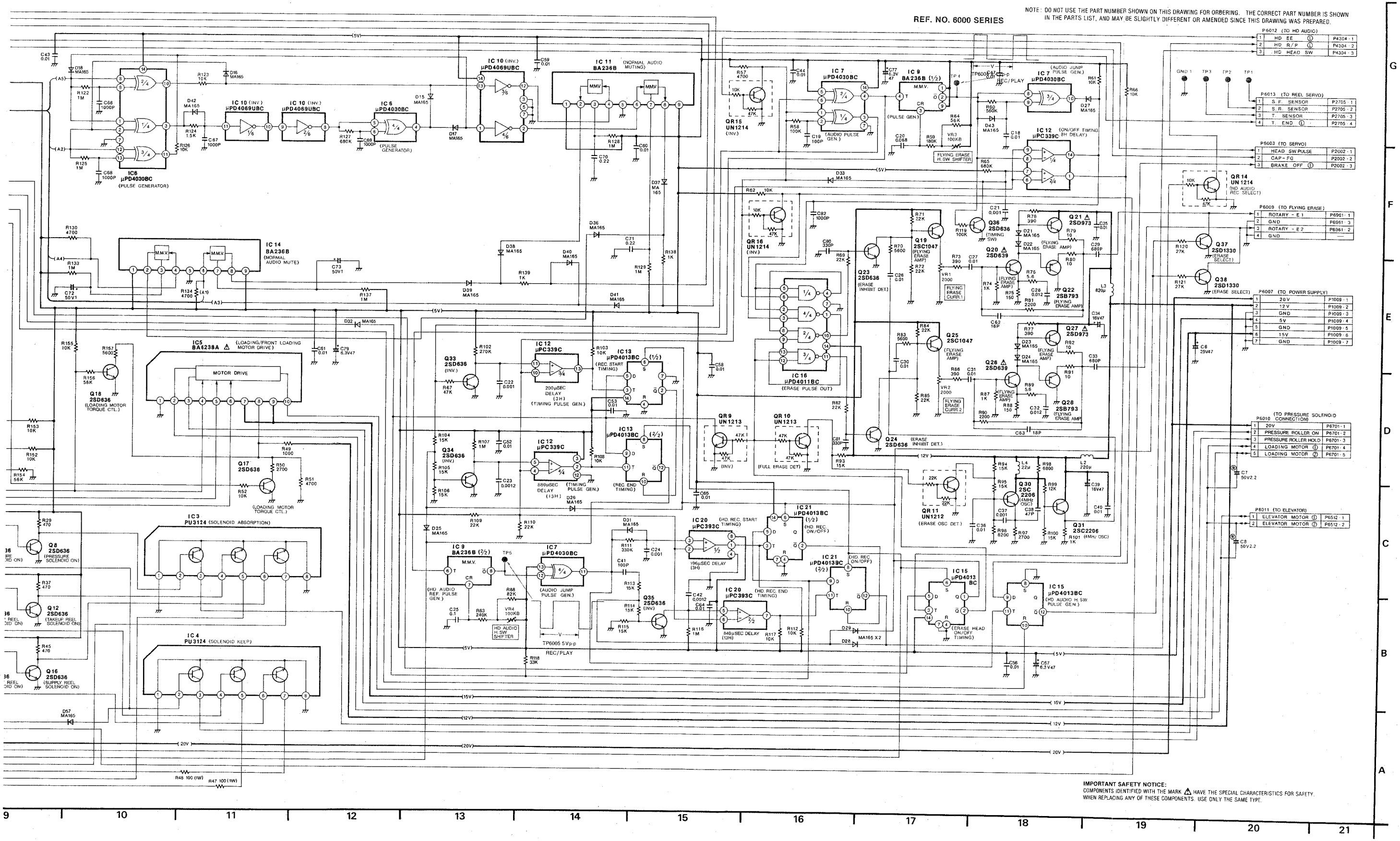
ADDRESS INFORMATION

SYSTEM CONTROL SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
P6001 (TO NORMAL AUDIO)
P4001-1 CH 1 EE
P4001-2 CH 2 EE
P4001-3 CH 1 R/P
P4001-4 CH 2 R/P
P4001-5 F.E.
P4001-6 CH 1 A.E
P4001-7 CH 2 A.E
P4001-8 CH 1 MUTE
P4001-9 CH 2 MUTE
P6008 (TO VIDEO)
P30009-1 EE
P30009-2 REC / PLAY
P30009-3 AUDIO DUB
P6004 (TO INTERFACE)
P6202-1 IRQ
P6202-2 SCK
P6202-3 SERIAL DATA
P6202-4 RESET
P6014
TO SERVO
TO INTERFACE
P2015-1 VIDEO R/P
P8202-5 FAN MOTOR STOP
P6002 (TO FRONT CONNECTION)
P6802-1 20V
P6802-2 SUPPLY-SOL. ON
P6802-3 SUPPLY-SOL. HOLD
P6802-4 TAKE UP-SOL. ON
P6802-5 TAKE UP-SOL. HOLD
P6802-6 POS-SW 1
P6802-7 POS-SW 3
P6802-8 POS-SW 5
P6802-9 REC ENABLE
P6802-10 GND
P6005 (TO ELEVATOR)
P6511-1 SUPPLY PHOTO TR
P6511-2 TAKE UP PHOTO TR
P6511-3 UP SW
P6511-4 IN SW
P6511-5 DOWN SW
(TO PRESSURE SOLENOID CONNECTION)
P6006
P6702-1 DEW SENSOR
P6702-2 LED A
P6702-3 LED K
P6702-4 GND
IC 17 AN90B22 (INV.)
IC 8 AN90B20 (INV.)
IC 1 µPD1512AC154 (SYSTEM CTL. MICROCOMPUTER)
AUDIO CH2 EE
AUDIO CH2 R/P
AUDIO CH2 ERASE
EDIT
AUDIO CH1 EE
AUDIO CH1 R/P
AUDIO CH1 ERASE
TAPE END
SERIAL DATA IN
SERIAL DATA OUT
SERIAL CLOCK
SAFETY MATRIX IN 0
SAFETY MATRIX IN 1
SAFETY MATRIX IN 2
SAFETY MATRIX IN 3
S-PHOTO
T-PHOTO
SENSOR LED
CAP FG IN
TEST
GND
INT
VCC
FULL ERASE
FLYING ERASE
VIDEO/HD R/P
VIDEO/HD EE
DURING SUB. LOAD
LOAD ELEVATOR
LOAD ELEVATOR
LOAD ELEVATOR
T. BRAKE SOLENOID
S. BRAKE SOLENOID
PRESSURE ROLLER SOLENOID
SENSOR LED PULSE
MATRIX PULSE OUT 1
MATRIX PULSE OUT 0
RESET
X2
X1
4.43MHz
X1 VSX0082
A LINE
DA 1 DAN401
RA1 4700 × 5
RA2 10K × 4
RA3 10K × 4
RA4 47K × 4
MA165 X 8
Q1 2SC3811 (INV.)
QR12 UN1111 (INV.)
QR13 UN1111 (INV.)
IC 2 µPC339C (SAFETY PROTECTOR)
Q2 2SD636 (SENSOR LED OPEN DET.)
Q3 2SB644 (WAVEFORM SHAPING)
Q4 2SD636 (PULSE AMP)
Q5 2SD636 (PRESSURE SOLENOID HOLD)
Q6 2SD636 (PRESSURE SOLENOID DET.)
Q7 2SD636 (PRESSURE SOLENOID ON)
Q8 2SD636 (PRESSURE SOLENOID ON)
Q9 2SD636 (TAKEUP REEL SOLENOID HOLD)
Q10 2SD636 (TAKEUP REEL SOLENOID DET.)
Q11 2SD636 (TAKEUP REEL SOLENOID ON)
Q12 2SD636 (TAKEUP REEL SOLENOID ON)
Q13 2SD636 (SUPPLY REEL SOLENOID HOLD)
Q14 2SD636 (SUPPLY REEL SOLENOID DET.)
Q15 2SD636 (SUPPLY REEL SOLENOID ON)
Q16 2SD636 (SUPPLY REEL SOLENOID ON)
IC 6 µPD4030BC (PULSE GENERATOR)
IC 10 (INV.) µPD4069UBC
IC 8 µPD4030BC (PULSE GENERATOR)
IC 14 BA236B (NORMAL AUDIO MUTE)
M.M.V.
IC5 BA6238A (LOADING/FRONT LOADING MOTOR DRIVE)
MOTOR DRIVE
Q18 2SD636 (LOADING MOTOR TORQUE CTL.)
Q17 2SD636 (LOADING MOTOR TORQUE CTL.)
IC3 PU3124 (SOLENOID ABSORPTION)
IC4 PU3124 (SOLENOID KEEP)
(5V)
(20V)
R46 100 (1W)
R47 100 (1W)

REF. NO. 6000 SERIES

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.


IC8 μPD4030BC (PULSE GENERATOR)
IC 10 (INV.) μPD4069UBC
IC 6 μPD4030BC (PULSE GENERATOR)
IC 10 (INV.) μPD4069UBC
IC 11 BA236B (NORMAL AUDIO MUTING)
IC 14 BA236B (NORMAL AUDIO MUTE)
IC5 BA6238A ⚠ (LOADING/FRONT LOADING MOTOR DRIVE)
MOTOR DRIVE
Q18 2SD636 (LOADING MOTOR TORQUE CTL.)
Q17 2SD636 (LOADING MOTOR TORQUE CTL.)
IC3 PU3124 (SOLENOID ABSORPTION)
IC4 PU3124 (SOLENOID KEEP)
Q8 2SD636 (PRESSURE SOLENOID ON)
Q12 2SD636 (TAKEUP REEL SOLENOID ON)
Q16 2SD636 (SUPPLY REEL SOLENOID ON)
Q33 2SD636 (INV.)
Q34 2SD636 (INV.)
IC 12 μPC339C 200μSEC DELAY (3H) (TIMING PULSE GEN.)
IC 12 μPC339C 880μSEC DELAY (13H) (TIMING PULSE GEN.)
IC13 μPD4013BC (1/2) (REC. START TIMING)
IC13 μPD4013BC (2/2) (REC END TIMING)
IC 9 BA236B (2/2) (HD AUDIO REF. PULSE GEN.)
IC7 μPD4030BC (AUDIO JUMP PULSE GEN.)
TP5
TP6005 5Vp-p REC/PLAY
HD AUDIO H.SW SHIFTER
Q35 2SD636 (INV)
IC 20 μPC393C (HD. REC. START TIMING) 196μSEC DELAY (3H)
IC 20 μPC393C (HD. REC. END TIMING) 840μSEC DELAY (13H)
IC 21 μPD4013BC (1/2) (HD. REC. ON/OFF)
IC 21 μPD4013BC (2/2) (HD. REC. ON/OFF)
IC 15 μPD4013BC (ERASE HEAD ON/OFF TIMING)
IC 15 μPD4013BC (HD AUDIO H.SW PULSE GEN.)
QR15 UN1214 (INV.)
IC 7 μPD4030BC (AUDIO PULSE GEN.)
IC 9 BA236B (1/2) (PULSE GEN.)
TP4
TP6004 5Vp-p REC/PLAY
IC 7 μPD4030BC (AUDIO JUMP PULSE GEN.)
IC 12 μPC339C (ON/OFF TIMING 8H DELAY)
FLYING ERASE H.SW SHIFTER
QR16 UN1214 (INV.)
Q23 2SD636 (ERASE INHIBIT DET.)
Q19 2SC1047 (FLYING ERASE AMP)
Q36 2SD636 (TIMING SW)
Q20 ⚠ 2SD639
Q21 ⚠ 2SD973
Q22 2SB793 (FLYING ERASE AMP)
FLYING ERASE CURR.1
IC 16 μPD4011BC (ERASE PULSE OUT)
Q25 2SC1047 (FLYING ERASE AMP)
Q26 ⚠ 2SD639
Q27 ⚠ 2SD973
Q28 2SB793 (FLYING ERASE AMP)
FLYING ERASE CURR.2
QR9 UN1213 (INV)
QR10 UN1213 (FULL ERASE DET)
Q24 2SD636 (ERASE INHIBIT DET.)
QR11 UN1212 (ERASE OSC DET.)
Q30 2SC2206 (4MHz OSC)
Q31 2SC2206 (4MHz OSC)
QR14 UN1214 (HD AUDIO REC SELECT)
Q37 2SD1330 (ERASE SELECT)
Q38 2SD1330 (ERASE SELECT)
GND 1
TP3
TP2
TP1
P6012 (TO HD AUDIO)
1 HD EE Ⓛ P4304-1
2 HD R/P Ⓛ P4304-2
3 HD HEAD SW P4304-3
P6013 (TO REEL SERVO)
1 S.F. SENSOR P2705-1
2 S.R. SENSOR P2705-2
3 T. SENSOR P2705-3
4 T. END ① P2705-4
P6003 (TO SERVO)
1 HEAD SW PULSE P2002-1
2 CAP-FG P2002-2
3 BRAKE OFF ① P2002-3
P6009 (TO FLYING ERASE)
1 ROTARY-E1 P6961-1
2 GND P6961-3
3 ROTARY-E2 P6961-2
4 GND —
P6007 (TO POWER SUPPLY)
1 20V P1009-1
2 12V P1009-2
3 GND P1009-3
4 5V P1009-4
5 GND P1009-5
6 15V P1009-6
7 GND P1009-7
P6010 (TO PRESSURE SOLENOID CONNECTION)
1 20V P6701-1
2 PRESSURE ROLLER ON P6701-2
3 PRESSURE ROLLER HOLD P6701-3
4 LOADING MOTOR ① P6701-4
5 LOADING MOTOR ② P6701-5
P6011 (TO ELEVATOR)
1 ELEVATOR MOTOR ① P6512-1
2 ELEVATOR MOTOR ② P6512-2
(5V)
(15V)
(12V)
(20V)
R48 100 (1W)
R47 100 (1W)
G
F
E
D
C
B
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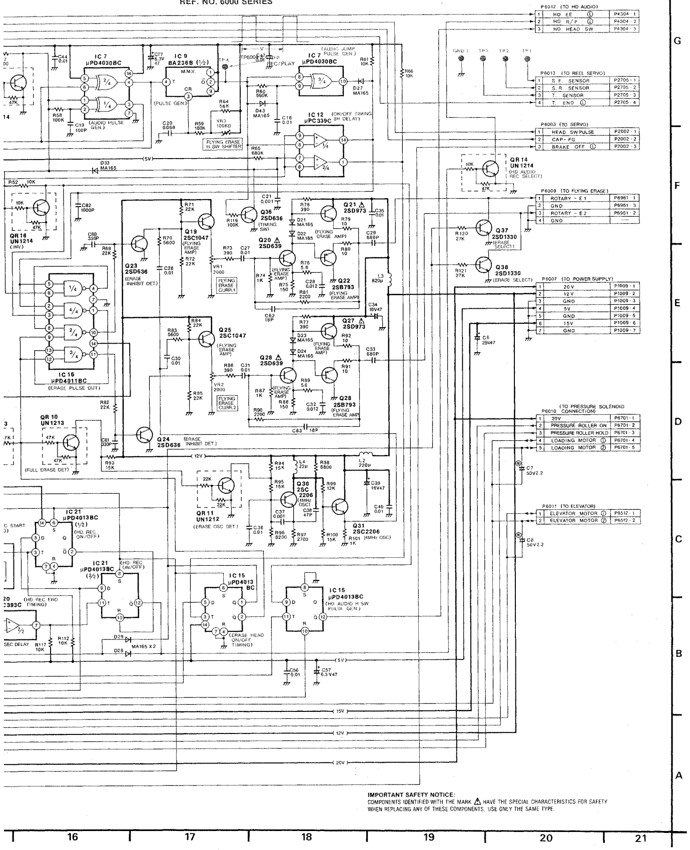
19
20
21

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

REF. NO. 6000 SERIES

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



P6012 (TO HD AUDIO)
1 HD EE Ⓛ P4304 · 1
2 HD R/P Ⓛ P4304 · 2
3 HD HEAD SW P4304 · 3
GND 1
TP3
TP2
TP1
P6013 (TO REEL SERVO)
1 S.F. SENSOR P2705 · 1
2 S.R. SENSOR P2705 · 2
3 T. SENSOR P2705 · 3
4 T. END Ⓛ P2705 · 4
P6003 (TO SERVO)
1 HEAD SW PULSE P2002 · 1
2 CAP-FG P2002 · 2
3 BRAKE OFF Ⓛ P2002 · 3
QR 14 UN1214 (HD AUDIO REC SELECT)
P6009 (TO FLYING ERASE)
1 ROTARY - E 1 P6961 · 1
2 GND P6961 · 3
3 ROTARY - E 2 P6961 · 2
4 GND
Q37 2SD1330 (ERASE SELECT)
Q38 2SD1330 (ERASE SELECT)
R120 27K
R121 27K
P6007 (TO POWER SUPPLY)
1 20V P1009 · 1
2 12V P1009 · 2
3 GND P1009 · 3
4 5V P1009 · 4
5 GND P1009 · 5
6 15V P1009 · 6
7 GND P1009 · 7
C6 25V47
P6010 (TO PRESSURE SOLENOID CONNECTION)
1 20V P6701 · 1
2 PRESSURE ROLLER ON P6701 · 2
3 PRESSURE ROLLER HOLD P6701 · 3
4 LOADING MOTOR ① P6701 · 4
5 LOADING MOTOR ② P6701 · 5
C7 50V2.2
P6011 (TO ELEVATOR)
1 ELEVATOR MOTOR ① P6512 · 1
2 ELEVATOR MOTOR ② P6512 · 2
C8 50V2.2
IC 7 μPD4030BC
IC 9 BA236B (½)
IC 7 μPD4030BC (AUDIO JUMP PULSE GEN.)
IC 12 μPC339C (ON/OFF TIMING 8H DELAY)
IC 16 μPD4011BC (ERASE PULSE OUT)
Q21 2SD973
Q36 2SD636 (TIMING SW)
Q19 2SC1047 (FLYING ERASE AMP)
Q20 2SD639
Q22 2SB793 (FLYING ERASE AMP)
Q23 2SD636 (ERASE INHIBIT DET.)
Q25 2SC1047 (FLYING ERASE AMP)
Q27 2SD973
Q26 2SD639
Q28 2SB793 (FLYING ERASE AMP)
Q24 2SD636 (ERASE INHIBIT DET.)
QR 16 UN1214 (INV.)
QR 10 UN1213 (FULL ERASE DET.)
QR 11 UN1212 (ERASE OSC DET.)
Q30 2SC2206 (4MHz OSC)
Q31 2SC2206 (4MHz OSC)
IC 21 μPD4013BC (½) (HD REC ON/OFF)
IC 21 μPD4013BC (½) (HD REC ON/OFF)
IC 15 μPD4013BC (ERASE HEAD ON/OFF TIMING)
IC 15 μPD4013BC (HD AUDIO H SW PULSE GEN.)
IC 20 (HD REC END TIMING)
(5V)
(12V)
(15V)
(20V)
16
17
18
19
20
21
G
F
E
D
C
B
A

IMPORTANT SAFETY NOTICE:
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SYSTEM CONTROL ICs DC VOLTAGE CHART

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	3.6	3.5	3.5	0	3.6	3.5	3.5	4.0	3.6	0.2	4.8	3.7	0.2	3.6	0.1	5.0	5.0	3.4	0.1	0
PLAY	0.1	3.5	3.5	0	0.1	3.5	3.5	4.0	3.6	0.2	4.8	3.7	0.3	3.6	0	5.0	5.0	3.4	2.4	0
F.F	3.6	3.5	3.5	0	3.6	3.5	3.5	4.0	3.6	0.2	4.8	3.7	0.2	3.7	0.1	5.0	5.0	3.4	0.1	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	1.8	1.2	4.9	4.9	0.1	0.6	0.5	4.2	3.6	3.6	0	0	0	0	0	4.3	4.7	3.9	3.5
PLAY	0	1.8	1.2	4.9	4.9	0.1	0.5	0.5	0	0	0	0	0	0	0	0	0.1	4.7	3.9	3.5
F.F	0	1.8	1.2	4.9	4.9	0.1	0.6	0.5	0	0	0	0	0	0	0	0	4.3	0	4.0	0
REF. NO.	IC6001																			
MODE	41	42																		
STOP	5.0	4.7																		
PLAY	5.0	4.7																		
F.F	5.0	4.7																		
REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	5.0	5.0	3.1	3.6	3.1	3.6	0	0.3	0.7	0.7	0	0	4.1						
PLAY	5.0	5.0	5.0	3.1	3.6	3.1	3.6	0	0.3	0.6	0.6	0	0	4.1						
F.F	5.0	5.0	5.0	3.1	3.6	3.1	3.6	0	0.3	0.7	0.7	0	0	4.1						
REF. NO.	IC6003										IC6004									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP	0	0.1	24.1	0.1	24.1	0.1	24.1	0			0	0.1	24.1	0.1	24.0	0.1	24.0	0		
PLAY	0	0.1	21.0	0.1	21.1	0.1	21.5	0			0	1.3	0.7	1.3	0.7	1.3	0.7	0		
F.F	0	0.1	22.6	0.1	21.7	0.1	21.7	0			0	0.1	22.7	1.3	0.7	1.3	0.7	0		
REF. NO.	IC6005																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	0	0.6	0.6	0	0	0	14.5	10.0	14.5	0.6										
PLAY	0	0.6	0.6	0	0	0	14.6	9.9	14.6	0.6										
F.F	0	0.6	0.6	0	0	0	14.6	9.9	14.6	0.6										
REF. NO.	IC6006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	3.5	3.5	0	0	0	0	0	3.5	3.2	0	0	3.5	3.2	5.0						
PLAY	3.5	3.5	0	0	0	0	0	3.5	3.2	0	0	3.5	3.2	5.0						
F.F	3.5	3.5	0	0	0	0	0	3.5	3.2	0	0	3.2	3.2	5.0						
REF. NO.	IC6007																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	0	0	4.8	5.0	0	0	0	0	0.1	5.0	0	5.0	5.0						
PLAY	1.9	1.9	0	4.8	5.0	0	0	1.5	3.0	3.2	1.7	3.3	5.0	5.0						
F.F	1.9	1.9	0	4.8	5.0	0	0	1.5	3.0	2.2	1.7	3.3	5.0	5.0						
REF. NO.	IC6008																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	3.5	3.5	3.5	3.5	3.5	3.6	3.6	0	0	0	6.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
PLAY	3.5	3.5	3.5	3.5	3.5	0.1	0.1	0	0	0	6.4	11.6	11.5	0.1	0.1	0.1	0.1	0.1		
F.F	3.5	3.5	3.5	3.5	3.5	3.6	3.6	0	0	0	6.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
REF. NO.	IC6009																			
MODE	1	2	3	4	5	6	7	8	9											
STOP	5.0	0	0.1	4.8	0	4.8	0.1	0	5.0											
PLAY	5.0	1.5	0.4	4.8	0	4.8	0.8	3.3	5.0											
F.F	3.0	1.5	0.4	4.8	0	4.8	0.8	3.3	5.0											
REF. NO.	IC6010																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	4.9	0	5.0	0	5.0	0	0	5.0	5.0	0	4.9	0	5.0						
PLAY	0	4.9	0	5.0	0	5.0	0	0	5.0	5.0	0	4.9	0	5.0						
F.F	0	4.9	0	5.0	0	5.0	0	0	5.0	5.0	0	4.9	0	5.0						
REF. NO.	IC6011																			
MODE	1	2	3	4	5	6	7	8	9											
STOP	5.0	0	0	4.9	0	4.9	0	0	5.0											
PLAY	5.0	0	0	4.9	0	4.9	0	0	5.0											
F.F	5.0	0	0	4.9	0	4.9	0	0	5.0											
REF. NO.	IC6012																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	5.0	5.0	2.5	4.5	2.5	0.4	0	2.5	2.5	4.8	0	5.0	0.7						
PLAY	1.6	5.0	5.0	2.5	4.5	2.5	1.4	1.5	2.5	2.5	4.8	0	4.9	2.3						
F.F	1.6	5.0	5.0	2.5	4.5	2.5	1.4	1.5	2.5	2.5	4.8	0	4.9	2.3						
REF. NO.	IC6013																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	0	5.0	0	5.0	4.9	0	0.1	5.0	0	5.0	0	5.0	5.0						
PLAY	5.0	0	4.9	0	5.0	4.9	0	0	5.0	0	5.0	0	5.0	5.0						
F.F	5.0	0	4.9	0	5.0	4.9	0	0	5.0	0	5.0	0	5.0	5.0						
REF. NO.	IC6014																			
MODE	1	2	3	4	5	6	7	8	9											
STOP	5.0	0	0	3.6	0	3.6	0	0	5.0											
PLAY	5.0	0	0	0.1	0	0.1	0	0	5.0											
F.F	5.0	0	0	3.6	0	3.6	0	0	5.0											

REF. NO.	IC6015																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.9	0	0	0	3.9	0.1	0	0	5.0	4.3	5.0	4.9	0	5.0						
PLAY	4.9	0	1.6	0	3.9	0.1	0	0	2.5	0.1	1.7	2.5	2.5	5.0						
F.F	4.9	0	1.6	0	4.0	0.1	0	0	2.5	4.3	1.7	4.9	0	5.0						
REF. NO.	IC6016																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	0.7	5.0	5.0	0.7	0	0	5.0	0	4.9	4.9	0	5.0	5.0						
PLAY	2.5	2.3	3.9	3.9	2.3	1.9	0	3.9	0	4.9	4.9	0	3.9	5.0						
F.F	2.5	2.3	3.9	3.9	2.3	1.9	0	3.9	0	4.9	4.9	0	3.9	5.0						
REF. NO.	IC6017																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	0.1	0.1	0.1	0.1	0.1	2.7	0	4.3	0	0	0.2	0.4	0.1	12.0	12.0	12.0	12.0	12.0		
PLAY	0.1	0.1	0.1	0.1	0.1	2.7	0	0.1	0	0	11.7	0.4	0.1	12.0	12.0	12.0	12.0	12.0		
F.F	0.1	0.1	0.1	0.1	0.1	2.7	0	4.3	0	0	0.2	0.4	0.1	12.0	12.0	12.0	12.0	12.0		
REF. NO.	IC6020																			
MODE	1	2	3	4	5	6	7	8												
STOP	5.0	2.5	4.8	0	4.5	2.5	5.0	5.0												
PLAY	1.6	2.5	1.5	0	4.5	2.5	5.0	5.0												
F.F	1.6	2.5	1.5	0	4.5	2.5	5.0	5.0												
REF. NO.	IC6021																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.0	0	5.0	0	5.0	4.9	0	0.1	5.0	0	5.0	0	5.0	5.0						
PLAY	5.0	0	1.6	0	5.0	4.9	0	0.1	5.0	0	5.0	0	5.0	5.0						
F.F	5.0	0	1.6	0	5.0	4.9	0	0.1	5.0	0	5.0	0	5.0	5.0						

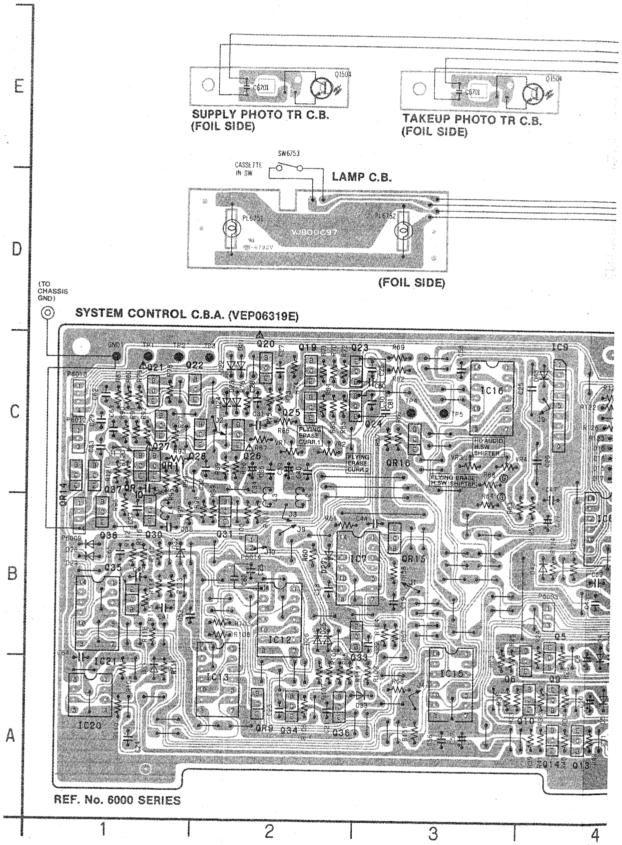
MEASUREMENT TAPE...S-VHS CASSETTE TAPE

SYSTEM CONTROL TRANSISTORs DC VOLTAGE CHART

REF. NO.	Q6001			Q6002			Q6003			Q6004			Q6005			Q6006		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	3.6	0.2	0	3.4	0.2	10.0	3.6	9.6	0	7.8	−0.4	0.1	5.0	0.1	0	0.1	0.7
PLAY	0	3.6	0.2	0	3.4	0.2	9.9	3.6	9.5	0	7.7	−0.4	4.4	5.0	5.0	0	5.0	0
F.F	0	3.6	0.2	0	3.4	0.2	9.9	3.6	9.5	0	7.7	−0.4	0.1	5.0	0.1	0	0.1	0.6
REF. NO.	Q6007			Q6008			Q6009			Q6010			Q6011			Q6012		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0.7	0	0	0.1	0.7	0.1	5.0	0.1	0	0.1	0.6	0	0.7	0	0	0.1	0.7
PLAY	0	0.7	0	0	0.1	0.7	4.4	5.0	5.0	0	5.0	0	0	0.7	0	0	0.1	0.7
F.F	0	0.7	0	0	0.1	0.7	4.4	5.0	5.0	0	5.0	0	0	0.7	0	0	0.1	0.7
REF. NO.	Q6013			Q6014			Q6015			Q6016			Q6017			Q6018		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.1	5.0	0.1	0	0	0.6	0	0.7	0	0	0.1	0.7	0	9.9	0	0	9.9	0
PLAY	4.4	5.0	5.0	0	5.0	0	0	0.7	0	0	0.1	0.7	0	9.9	0	0	9.9	0
F.F	4.4	5.0	5.0	0	5.0	0	0	0.7	0	0	0.1	0.7	0	9.9	0	0	9.9	0
REF. NO.	Q6019			Q6020			Q6021			Q6022			Q6023			Q6024		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	11.9	0	1.4	5.9	2.0	6.7	10.9	7.4	6.5	0	5.9	0	0	0.6	0	0	0.7
PLAY	0	11.9	0	1.4	5.9	2.0	6.7	10.9	7.3	6.5	0	5.9	0	0	0.6	0	0	0.7
F.F	0	11.9	0	1.4	5.9	2.0	6.7	10.9	7.3	6.5	0	5.9	0	0	0.6	0	0	0.6
REF. NO.	Q6025			Q6026			Q6027			Q6028			Q6030			Q6031		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	11.9	0	1.4	5.0	2.0	6.8	10.9	7.4	6.6	0	6.0	0	11.9	0	5.5	11.9	6.2
PLAY	0	11.9	0	1.4	5.9	2.0	6.8	10.9	7.4	6.6	0	5.9	0	11.9	0	5.5	11.9	6.2
F.F	0	11.9	0	1.4	5.9	2.0	6.8	10.8	7.4	6.5	0	5.9	0	11.9	0	5.5	11.9	6.2
REF. NO.	Q6033			Q6034			Q6035			Q6036			Q6037			Q6038		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	4.8	0	0	4.5	0	0	4.5	0	0	0.4	0	0	0	0.6	0	0	0.6
PLAY	0	4.8	0	0	4.5	0	0	4.5	0	0	1.4	0.2	0	0	0.6	0	0	0.6
F.F	0	4.8	0	0	4.5	0	0	4.5	0	0	1.4	0.2	0	0	0.6	0	0	0.6
REF. NO.	QR6009			QR6010			QR6011			QR6012			QR6013			QR6014		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	5.0	0	0	7.4	0	0	0	7.4	5.0	4.9	0.1	5.0	0.1	4.9	0	11.9	0
PLAY	0	5.0	0	0	7.4	0	0	0	7.4	5.0	4.9	0.1	5.0	0.1	4.9	0	11.9	0
F.F	0	5.0	0	0	7.4	0	0	0	7.4	5.0	4.9	0.1	5.0	0.1	4.9	0	0	4.9
REF. NO.	QR6015			QR6016														
MODE	E	C	B	E	C	B												
STOP	0	3.8	0	0	0	3.8												
PLAY	0	1.9	2.4	0	2.5	1.9												
F.F	0	1.9	2.4	0	2.5	1.9												

MEASUREMENT TAPE...S-VHS CASSETTE TAPE

SYSTEM CONTROL C.B.A. (VEP06319E)


E
D
C
B
A
1
2
3
4
Q1504
C6701
SUPPLY PHOTO TR C.B.
(FOIL SIDE)
TAKEUP PHOTO TR C.B.
(FOIL SIDE)
SW6753
CASSETTE IN SW
LAMP C.B.
PL6751
PL6752
(FOIL SIDE)
(TO CHASSIS GND)
SYSTEM CONTROL C.B.A. (VEP06319E)
FLYING ERASE CURR.1
FLYING ERASE CURR.2
HD AUDIO H.SW SHIFTER
FLYING ERASE H.SW SHIFTER
IC16
IC7
IC12
IC13
IC15
IC20
IC21
IC9
QR14
QR15
QR16
REF. No. 6000 SERIES

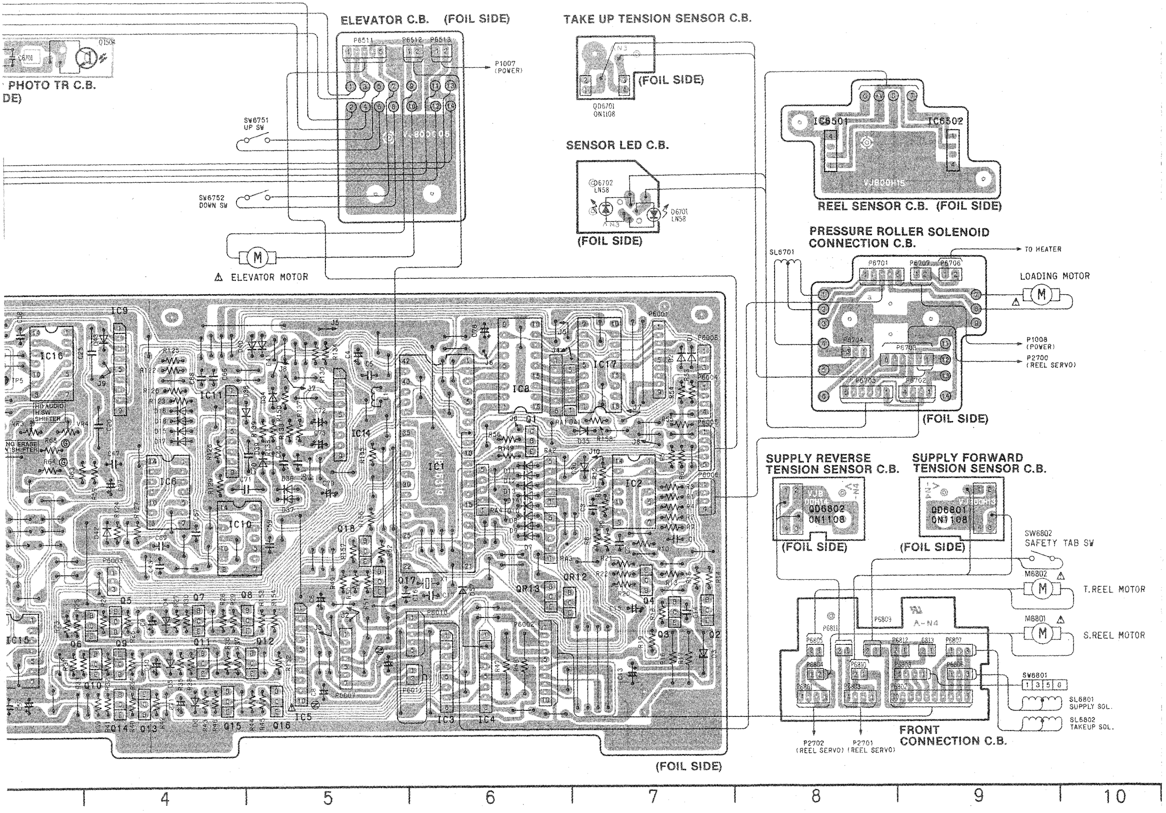


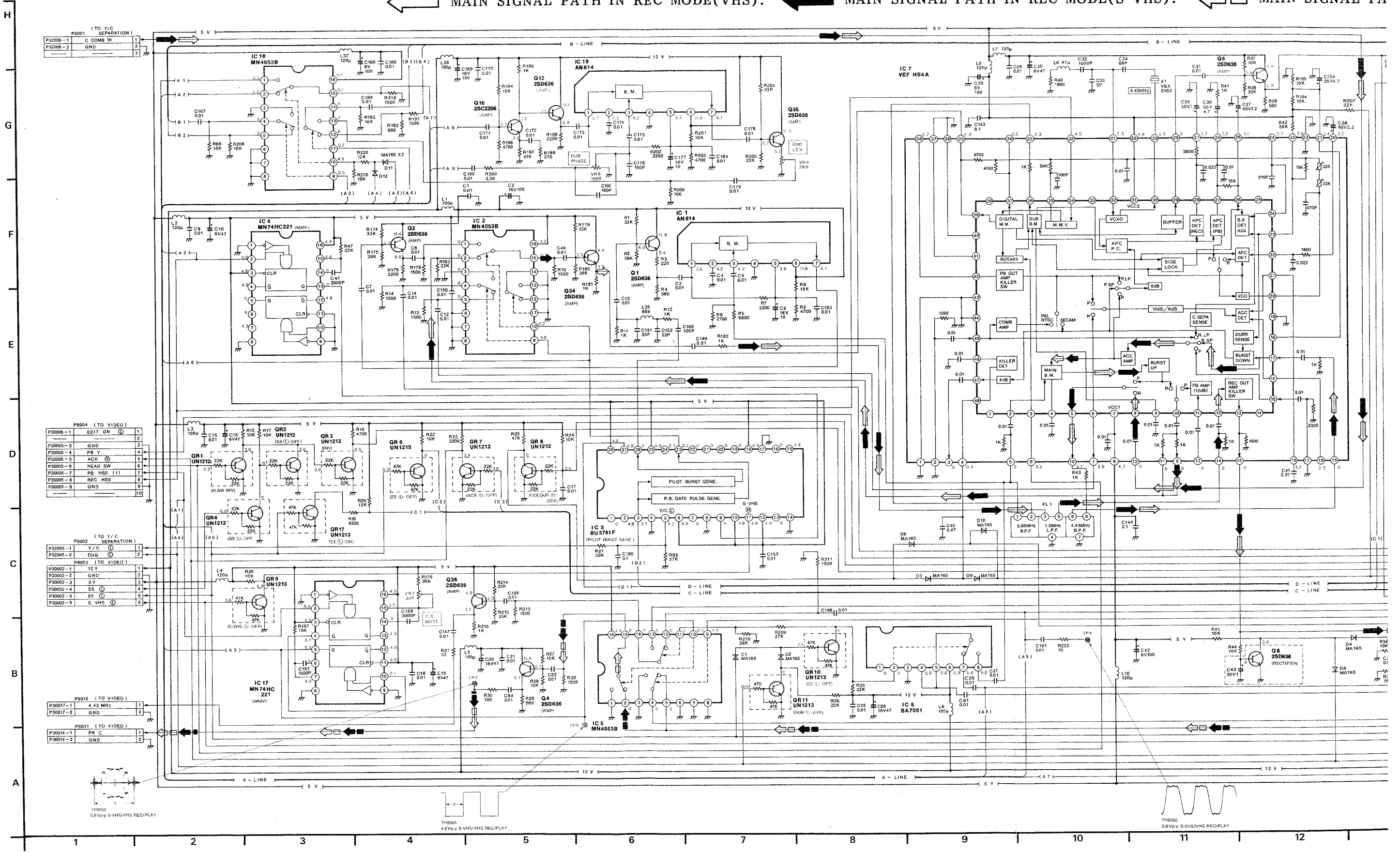
PHOTO TR C.B.
DE)
Q1501
ELEVATOR C.B. (FOIL SIDE)
P6511
P6512
P6513
P1007 (POWER)
SW6751 UP SW
SW6752 DOWN SW
ELEVATOR MOTOR
TAKE UP TENSION SENSOR C.B.
(FOIL SIDE)
QD6701 ON1108
SENSOR LED C.B.
QD6702 LN58
D6701 LN58
(FOIL SIDE)
IC6501
IC6502
VJB00H15
REEL SENSOR C.B. (FOIL SIDE)
PRESSURE ROLLER SOLENOID CONNECTION C.B.
SL6701
TO HEATER
P6701
P6707
P6706
LOADING MOTOR
P6704
P6703
P6705
P6702
P1008 (POWER)
P2700 (REEL SERVO)
(FOIL SIDE)
IC9
IC16
IC11
IC14
IC8
IC17
IC1
IC2
IC6
IC10
IC15
IC3
IC4
IC5
QR12
QR13
Q18
P6001
P6005
P6004
P6003
P6010
P6002
P6011
HD AUDIO H.SW SHIFTER
NG ERASE H.SHIFTER
(FOIL SIDE)
SUPPLY REVERSE TENSION SENSOR C.B.
QD6802 ON1108
(FOIL SIDE)
SUPPLY FORWARD TENSION SENSOR C.B.
QD6801 ON1108
(FOIL SIDE)
SW6802 SAFETY TAB SW
M6802
T.REEL MOTOR
M6801
S.REEL MOTOR
SW6801
SL6801 SUPPLY SOL.
SL6802 TAKEUP SOL.
P2702 (REEL SERVO)
P2701 (REEL SERVO)
FRONT CONNECTION C.B.
4
5
6
7
8
9
10

System Control C.B.A.	
Transistor	
Q6001	C-6
Q6002	B-7
Q6003	B-7
Q6004	B-7
Q6005	B-4
Q6006	A-4
Q6007	B-4
Q6008	B-5
Q6009	A-4
Q6010	A-4
Q6011	A-4
Q6012	A-5
Q6013	A-4
Q6014	A-4
Q6015	A-4
Q6016	A-5
Q6017	B-5
Q6018	B-5
Q6019	C-2
Q6020	C-2
Q6021	C-1
Q6022	C-2
Q6023	C-2
Q6024	C-2
Q6025	C-2
Q6026	C-2
Q6027	C-1
Q6028	C-2
Q6030	B-1
Q6031	B-2
Q6033	B-3
Q6034	A-2
Q6035	B-1
Q6036	A-2
Q6037	C-1
Q6038	B-1
Transistor & Resistor	
QR6009	A-2
QR6010	C-1
QR6011	C-1
QR6012	B-6
QR6013	B-6
QR6014	C-1
QR6015	B-3
QR6016	C-3
Integrated Circuit	
IC6001	C-6
IC6002	B-7
IC6003	A-6
IC6004	A-6
IC6005	A-5
IC6006	B-4
IC6007	B-3
IC6008	C-6
IC6009	C-4
IC6010	B-4
IC6011	C-4
IC6012	B-2
IC6013	A-2
IC6014	C-5
IC6015	A-3
IC6016	C-3
IC6017	C-7
IC6020	A-1
IC6021	B-1
Test Point	
TP6001	C-1
TP6002	C-1
TP6003	C-2
TP6004	C-3
TP6005	C-3
GND1	C-1
Adjustment	
VR6001	C-2
VR6002	C-2
VR6003	C-3
VR6004	C-3
Connector	
P6001	C-7
P6002	A-6
P6003	B-4
P6004	C-7
P6005	C-7
P6006	B-7
P6007	A-5
P6008	C-7
P6009	B-1
P6010	A-6
P6011	A-6
P6012	C-1
P6013	C-1
P6014	B-2

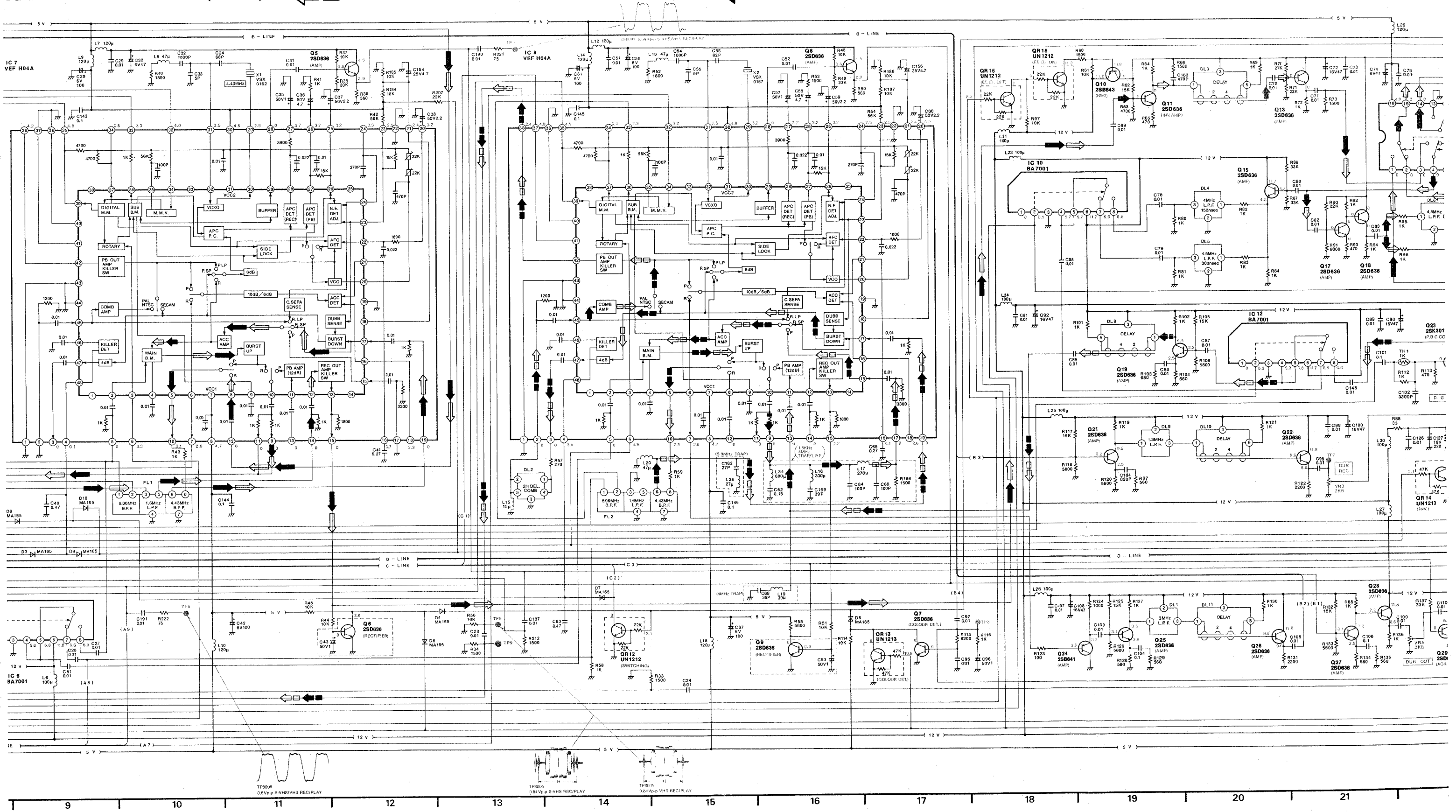
ADDRESS INFORMATION

CHROMINANCE SCHEMATIC DIAGRAM

⇦ MAIN SIGNAL PATH IN REC MODE(VHS). ⬅ MAIN SIGNAL PATH IN REC MODE(S-VHS). ⇦□ MAIN SIGNAL PA


H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
P8001 (TO Y/C SEPARATION)
P32006-1 C COMB IN
P32006-2 GND
5 V
B - LINE
12 V
IC 18 MN4053B
IC 19 AN614
Q12 2SD636 (AMP)
Q16 2SC2206 (AMP)
Q35 2SD636 (AMP)
DUB PHASE
DUB LEV.
IC 4 MN74HC221 (MMV)
Q2 2SD636 (AMP)
IC 2 MN4053B
Q34 2SD636 (AMP)
IC 1 AN614
Q1 2SD636 (AMP)
B. M.
P8004 (TO VIDEO)
P30005-1 EDIT ON
P30005-3 GND
P30005-4 PB Y
P30005-5 ACK
P30005-6 HEAD SW
P30005-7 PB HSS (1)
P30005-8 REC HSS
P30005-9 GND
QR1 UN1212 (H.SW INV)
QR2 UN1212 (SS OFF)
QR3 UN1212 (INV)
QR4 UN1212 (SS OFF)
QR6 UN1213 (EE OFF)
QR7 UN1212 (ACK OFF)
QR8 UN1212 (COLOUR OFF)
QR17 UN1213 (EE ON)
IC 3 BU3781F (PILOT BURST GENE.)
PILOT BURST GENE.
P.B. GATE PULSE GENE.
Y/C
S-VHS
P8002 (TO Y/C SEPARATION)
P32005-1 Y/C
P32005-2 DUB
P8003 (TO VIDEO)
P30002-1 12 V
P30002-2 GND
P30002-3 5 V
P30002-4 SS
P30002-5 EE
P30002-6 S VHS
QR9 UN1213 (S-VHS OFF)
IC 17 MN74HC221 (MMV)
Q36 2SD636 (AMP)
P.B. MUTE
Q4 2SD636 (AMP)
IC 5 MN4053B
QR10 UN1213 (EE OFF)
QR11 UN1213 (DUB OFF)
IC 6 BA7001
D - LINE
C - LINE
A - LINE
P8010 (TO VIDEO)
P30017-1 4.43 MHz
P30017-2 GND
P8011 (TO VIDEO)
P30014-1 PB C
P30014-2 GND
TP8002 0.6Vp-p S-VHS/VHS REC/PLAY
TP8005 4.8Vp-p S-VHS/VHS REC/PLAY
TP8006 0.6Vp-p S-VHS/VHS REC/PLAY
IC 7 VEF H04A
Q5 2SD636 (AMP)
X1 VSX 0162
4.43MHz
DIGITAL M.M.
SUB B.M.
M.M.V.
VCXO
BUFFER
APC DET (REC)
APC DET (PB)
B.E. DET ADJ
APC P.C.
ROTARY
SIDE LOCK
AFC DET
PB OUT AMP KILLER SW
6dB
VCO
10dB / 6dB
C.SEPA SENSE
ACC DET
COMB AMP
PAL NTSC SECAM
DUBB SENSE
BURST DOWN
KILLER DET
ACC AMP
BURST UP
MAIN B.M.
4dB
PB AMP (12dB)
REC OUT AMP KILLER SW
VCC1
VCC2
FL1
5.06MHz B.P.F.
1.0MHz L.P.F.
4.43MHz B.P.F.
Q6 2SD636 (RECTIFIER)

IGNAL PATH IN REC MODE(S-VHS). ⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS). ◀■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).



5 V
B - LINE
IC 7
VEF H04A
IC 8
VEF H04A
Q5 2SD636 (AMP)
Q8 2SD636 (AMP)
X1 VSX 0162
X2 VSX 0167
4.43MHz
DIGITAL M.M.
SUB B.M.
M.M.V.
VCXO
BUFFER
APC DET (REC)
APC DET (PB)
B.E. DET ADJ.
APC P.C.
SIDE LOCK
AFC DET
ROTARY
PB OUT AMP KILLER SW
VCO
6dB
10dB/6dB
ACC DET
C.SEPA SENSE
DUBB SENSE
COMB AMP
PAL NTSC
SECAM
ACC AMP
BURST UP
BURST DOWN
KILLER DET
MAIN B.M.
4dB
PB AMP (12dB)
REC OUT AMP KILLER SW
VCC1
VCC2
FL1
5.06MHz B.P.F.
1.6MHz L.P.F.
4.43MHz B.P.F.
FL 2
DL2 2H DEL COMB
(3.58MHz TRAP)
1.5KHz 4MHz TRAP/L.P.F.
(4MHz TRAP)
Q6 2SD636 (RECTIFIER)
Q9 2SD636 (RECTIFIER)
QR12 UN1212 (SWITCHING)
QR13 UN1213 (COLOUR DET.)
Q7 2SD636 (COLOUR DET.)
IC 6 BA7001
D - LINE
C - LINE
12 V
QR 15 UN1212
QR 16 UN1212
Q10 2SB643 (REG)
Q11 2SD636 (INV AMP)
Q13 2SD636 (AMP)
DL3 DELAY
IC 10 BA7001
DL4 4MHz L.P.F. 150nsec
DL5 4.5MHz L.P.F. 300nsec
Q15 2SD636 (AMP)
Q17 2SD636 (AMP)
Q18 2SD636 (AMP)
4.5MHz L.P.F.
DL8 DELAY
Q19 2SD636 (AMP)
IC 12 BA7001
Q23 2SK301
TH1
Q21 2SD636 (AMP)
DL9 1.3MHz L.P.F.
DL10 DELAY
Q22 2SD636 (AMP)
DUB REC
VR3 2KB
QR 14 UN1213 (INV)
D - LINE
Q24 2SB641 (AMP)
DL1 3MHz L.P.F.
Q25 2SD636 (AMP)
DL11 DELAY
Q26 2SD636 (AMP)
Q28 2SD636 (AMP)
Q27 2SD636 (AMP)
VR5 2KB
DUB OUT
TP5006 0.6Vp-p S-VHS/VHS REC/PLAY
TP5005 0.84Vp-p S-VHS REC/PLAY
TP5005 0.64Vp-p VHS REC/PLAY
9
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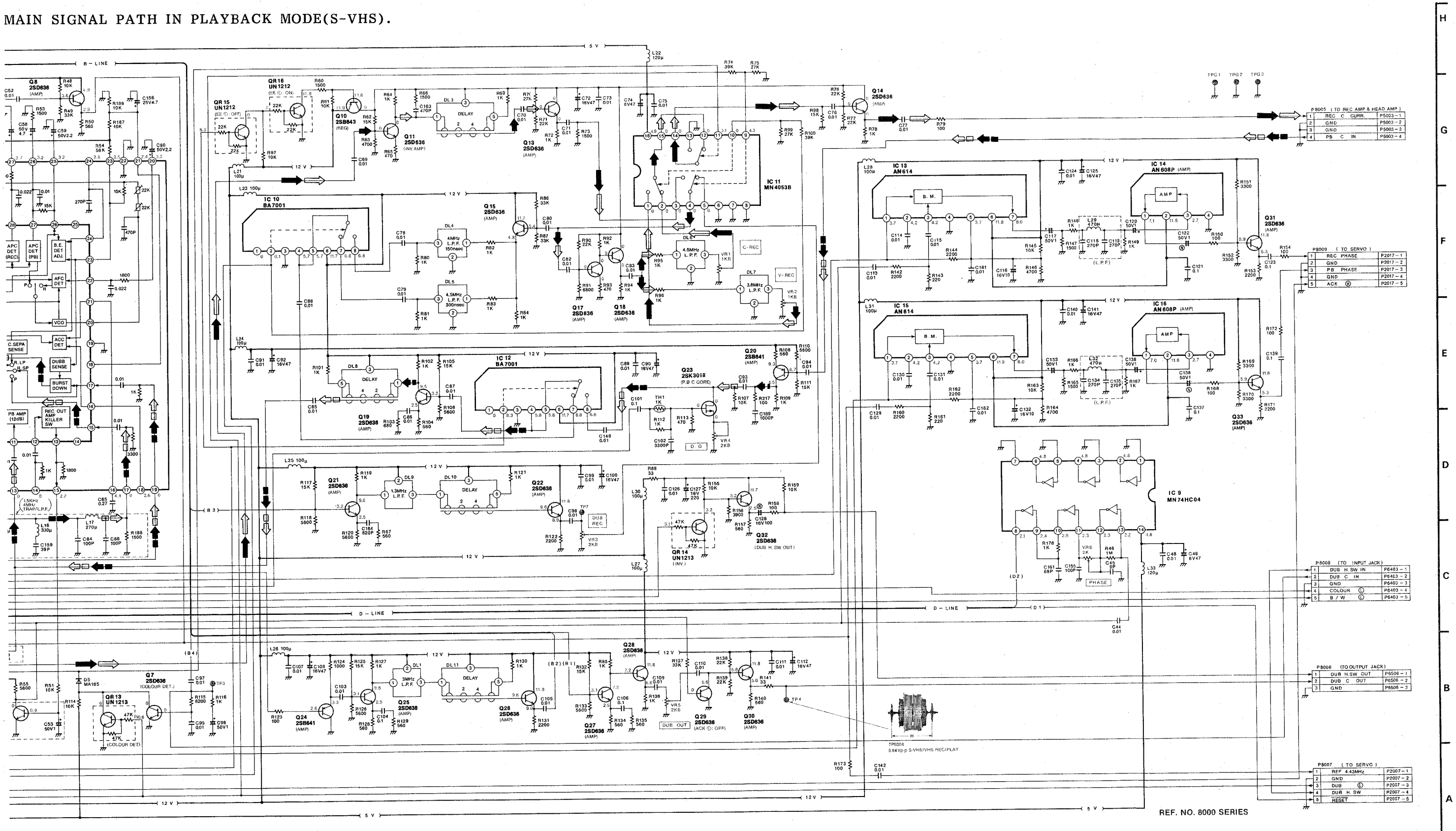
21

MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


5 V
12 V
B – LINE
D – LINE
Q8 2SD636 (AMP)
QR15 UN1212 (EE ①: OFF)
QR16 UN1212 (EE ①: ON)
Q10 2SB643 (REG)
Q11 2SD636 (INV.AMP)
DL3 DELAY
Q13 2SD636 (AMP)
IC 11 MN4053B
Q14 2SD636 (AMP)
IC 10 BA7001
Q15 2SD636 (AMP)
DL4 4MHz L.P.F. 150nsec
DL5 4.5MHz L.P.F. 300nsec
DL6 4.5MHz L.P.F.
DL7 3.8MHz L.P.F.
C-REC
V-REC
Q17 2SD636 (AMP)
Q18 2SD636 (AMP)
APC DET (REC)
APC DET (PB)
B.E. DET ADJ.
AFC DET
VCO
C.SEPA SENSE
ACC DET
DUBB SENSE
BURST DOWN
PB AMP (12dB)
REC OUT AMP KILLER SW
R.LP
R.SP
IC 12 BA7001
DL8 DELAY
Q19 2SD636 (AMP)
Q20 2SB641 (AMP)
Q23 2SK3018 (P.B C CORE)
TH1
D G
VR4 2KB
1.5KHz 4MHz TRAP/L.P.F.
Q21 2SD636 (AMP)
DL9 1.3MHz L.P.F.
DL10 DELAY
Q22 2SD636 (AMP)
TP7
DUB REC
VR3 2KB
Q32 2SD636 (DUB H. SW OUT)
QR14 UN1213 (INV.)
Q7 2SD636 (COLOUR DET.)
QR13 UN1213 (COLOUR DET)
D5 MA165
TP3
Q24 2SB641 (AMP)
DL1 3MHz L.P.F.
DL11 DELAY
Q25 2SD636 (AMP)
Q26 2SD636 (AMP)
Q27 2SD636 (AMP)
Q28 2SD636 (AMP)
DUB OUT
VR5 2KB
Q29 2SD636 (ACK ①: OFF)
Q30 2SD636 (AMP)
TP4
TP6004 0.64Vp-p S-VHS/VHS REC/PLAY
IC 13 AN614
IC 14 AN608P (AMP)
IC 15 AN614
IC 16 AN608P (AMP)
B.M.
AMP
(L.P.F.)
Q31 2SD636 (AMP)
Q33 2SD636 (AMP)
IC 9 MN74HC04
PHASE
TPG1 TPG2 TPG3
P8005 (TO REC AMP & HEAD AMP)
1 REC C CURR. P5003 – 1
2 GND P5003 – 2
3 GND P5003 – 3
4 PB C IN P5003 – 4
P8009 (TO SERVO)
1 REC PHASE P2017 – 1
2 GND P2017 – 2
3 PB PHASE P2017 – 3
4 GND P2017 – 4
5 ACK ⓡ P2017 – 5
P8008 (TO INPUT JACK)
1 DUB H.SW IN P6403 – 1
2 DUB C IN P6403 – 2
3 GND P6403 – 3
4 COLOUR ① P6403 – 4
5 B / W ① P6403 – 5
P8006 (TO OUTPUT JACK)
1 DUB H.SW OUT P6506 – 1
2 DUB C OUT P6506 – 2
3 GND P6506 – 3
P8007 (TO SERVO)
1 REF 4.43MHz P2007 – 1
2 GND P2007 – 2
3 DUB ① P2007 – 3
4 DUB H. SW P2007 – 4
5 RESET P2007 – 5
H
G
F
E
D
C
B
A

REF. NO. 8000 SERIES

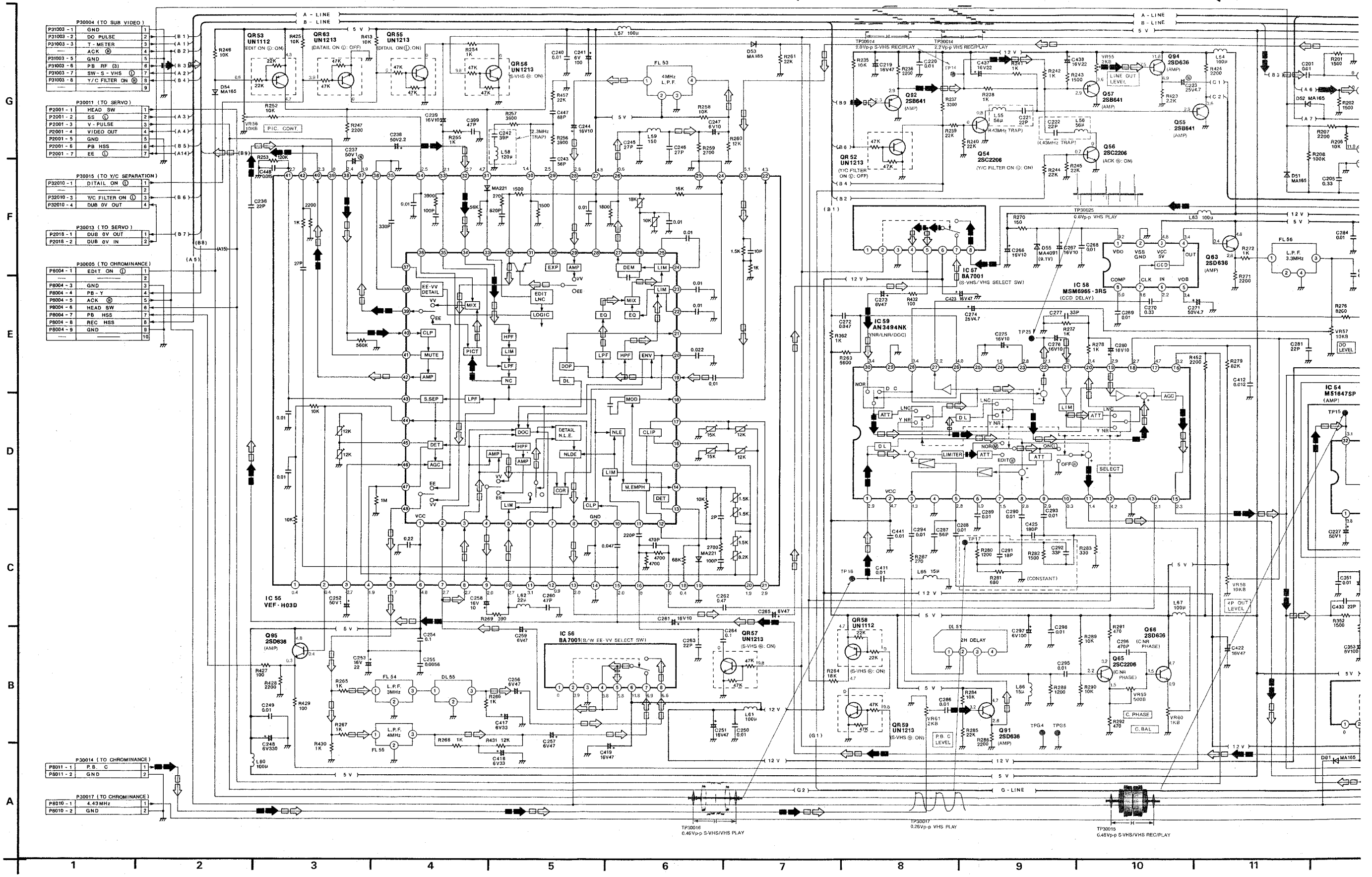
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE
WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE…S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

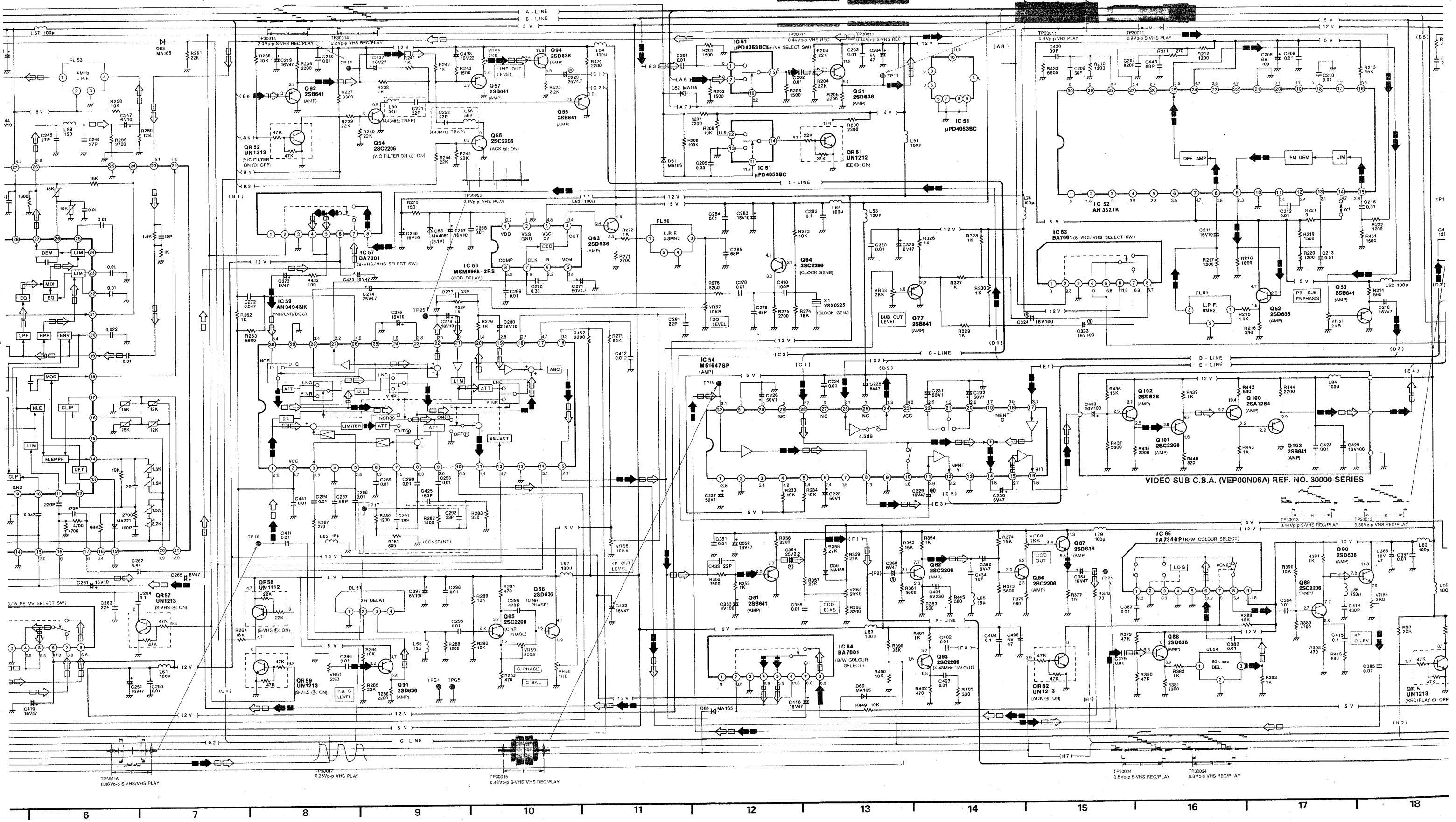
16 17 18 19 20 21 22 23 24 25 26 27 28

VIDEO SCHEMATIC DIAGRAM (1/2)

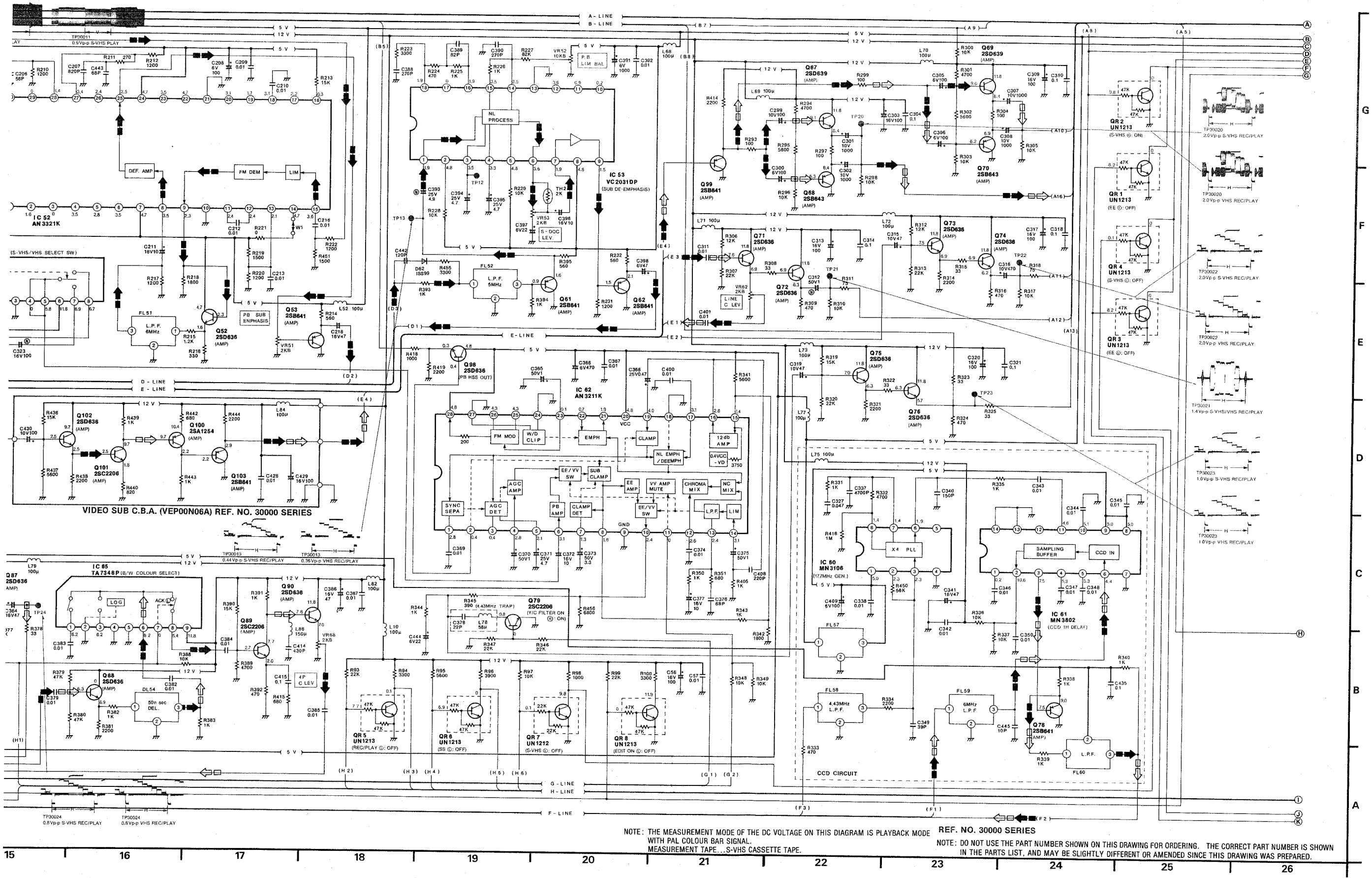
MAIN SIGNAL PATH IN REC MODE(VHS). MAIN SIGNAL PATH IN REC MODE(S-VHS). MAIN SIGN


P30004 (TO SUB VIDEO)
P31003-1 GND
P31003-2 DO PULSE
P31003-3 T-METER
ACK Ⓗ
P31003-5 GND
P31003-6 PB RF (3)
P31003-7 SW-S-VHS Ⓛ
P31003-8 Y/C FILTER ON Ⓗ
P30011 (TO SERVO)
P2001-1 HEAD SW
P2001-2 SS Ⓛ
P2001-3 V-PULSE
P2001-4 VIDEO OUT
P2001-5 GND
P2001-6 PB HSS
P2001-7 EE Ⓛ
P30015 (TO Y/C SEPARATION)
P32010-1 DITAIL ON Ⓛ
P32010-3 Y/C FILTER ON Ⓛ
P32010-4 DUB 0V OUT
P30013 (TO SERVO)
P2018-1 DUB 0V OUT
P2018-2 DUB 0V IN
P30005 (TO CHROMINANCE)
P8004-1 EDIT ON Ⓛ
P8004-3 GND
P8004-4 PB-Y
P8004-5 ACK Ⓗ
P8004-6 HEAD SW
P8004-7 PB HSS
P8004-8 REC HSS
P8004-9 GND
P30014 (TO CHROMINANCE)
P8011-1 P.B. C
P8011-2 GND
P30017 (TO CHROMINANCE)
P8010-1 4.43MHz
P8010-2 GND
A-LINE
B-LINE
G-LINE
5 V
12 V
QR53 UN1112
QR63 UN1213
QR55 UN1213
QR56 UN1213
QR52 UN1213
QR57 UN1213
QR58 UN1112
QR59 UN1213
Q92 2SB641
Q57 2SB641
Q55 2SB641
Q94 2SD636
Q54 2SC2206
Q56 2SC2206
Q63 2SD636
Q95 2SD636
Q65 2SC2206
Q66 2SD636
Q91 2SD636
IC 55 VEF-H03D
IC 56 BA7001 (B/W EE-VV SELECT SW)
IC 57 BA7001 (S-VHS/VHS SELECT SW)
IC 58 MSM6965-3RS (CCD DELAY)
IC 59 AN3494NK (YNR/LNR/DOC)
IC 54 M51647SP (AMP)
FL 53 4MHz L.P.F.
FL 54 L.P.F. 3MHz
FL 55 L.P.F. 4MHz
FL 56 L.P.F. 3.3MHz
DL 55
DL 51 2H DELAY
PIC. CONT.
LINE OUT LEVEL
DO LEVEL
4P OUT LEVEL
C. PHASE
C. BAL
P.B. C LEVEL
TP30014 2.0Vp-p S-VHS REC/PLAY
TP30014 2.2Vp-p VHS REC/PLAY
TP30025 0.6Vp-p VHS PLAY
TP30016 0.46Vp-p S-VHS/VHS PLAY
TP30017 0.25Vp-p VHS PLAY
TP30015 0.48Vp-p S-VHS/VHS REC/PLAY
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11

H IN REC MODE(VHS). ◀■ MAIN SIGNAL PATH IN REC MODE(S-VHS). ⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS). ◀■■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS)


A - LINE
B - LINE
C - LINE
D - LINE
E - LINE
F - LINE
G - LINE
FL 53 4MHz L.P.F.
Q92 2SB641 (AMP)
QR 52 UN1213 (Y/C FILTER ON ①: OFF)
Q54 2SC2206 (Y/C FILTER ON ①: ON)
Q57 2SB641 (AMP)
Q94 2SD636 (AMP)
Q55 2SB641 (AMP)
Q56 2SC2206 (ACK ⑥: ON)
LINE OUT LEVEL
IC 57 BA7001 (S-VHS/VHS SELECT SW)
IC 59 AN3494NK (YNR/LNR/DOC)
IC 58 MSM6965-3RS (CCD DELAY)
Q63 2SD636 (AMP)
FL56 L.P.F. 3.3MHz
Q64 2SC2206 (CLOCK GENE)
X1 VSX0225 (CLOCK GEN.)
Q77 2SB641 (AMP)
DUB OUT LEVEL
DO LEVEL
IC 51 μPD4053BC (EE/VV SELECT SW)
Q51 2SD636 (AMP)
QR51 UN1212 (EE ⑩: ON)
IC 52 AN3321K
DEF. AMP
FM DEM
LIM
IC 63 BA7001 (S-VHS/VHS SELECT SW)
FL51 6MHz
Q52 2SD636 (AMP)
PB SUB ENPHASIS
Q53 2SB641 (AMP)
IC 54 M51647SP (AMP)
Q102 2SD636 (AMP)
Q101 2SC2206 (AMP)
Q100 2SA1254 (AMP)
Q103 2SB641 (AMP)
VIDEO SUB C.B.A. (VEP00N06A) REF. NO. 30000 SERIES
QR57 UN1213 (S-VHS ⑥: ON)
QR58 UN1112 (S-VHS ⑥: ON)
QR59 UN1213 (S-VHS ⑥: ON)
DL 51 2H DELAY
Q65 2SC2206 (CNR PHASE)
Q66 2SD636 (CNR PHASE)
Q91 2SD636 (AMP)
P.B. C LEVEL
C. PHASE
C. BAL
4P OUT LEVEL
Q81 2SB641 (AMP)
CCD BIAS
Q82 2SC2206 (AMP)
Q86 2SC2206 (AMP)
Q87 2SD636 (AMP)
CCD OUT
IC 64 BA7001 (B/W COLOUR SELECT)
Q93 2SC2206 (4.43MHz INV.OUT)
QR 62 UN1213 (ACK ⑥: ON)
IC 65 TA7348P (B/W COLOUR SELECT)
LOG
Q88 2SD636 (AMP)
DL54 50n sec DEL.
Q89 2SC2206 (AMP)
Q90 2SD636 (AMP)
4P C LEV
QR 5 UN1213 (REC/PLAY ①: ON)
TP30016 0.46Vp-p S-VHS/VHS PLAY
TP30017 0.26Vp-p VHS PLAY
TP30015 0.48Vp-p S-VHS/VHS REC/PLAY
TP30024 0.8Vp-p S-VHS REC/PLAY
TP30024 0.8Vp-p VHS REC/PLAY
6
7
8
9
10
11
12
13
14
15
16
17
18

MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


A-LINE
B-LINE
IC 52
AN3321K
DEF. AMP
FM DEM
LIM
IC 53
VC2031DP
(SUB DE-EMPHASIS)
NL PROCESS
P.B LIM BAL
S-DOC LEV
FL51
L.P.F. 6MHz
Q52
2SD636
(AMP)
PB SUB ENPHASIS
Q53
2SB641
(AMP)
FL52
L.P.F. 5MHz
Q61
2SB641
(AMP)
Q62
2SB641
(AMP)
Q98
2SD636
(PB HSS OUT)
E-LINE
D-LINE
IC 62
AN3211K
FM MOD
W/D CLIP
EMPH
CLAMP
12db AMP
NL EMPH /DEEMPH
AGC AMP
EE/VV SW
SUB CLAMP
EE AMP
VV AMP MUTE
CHROMA MIX
NC MIX
SYNC SEPA
AGC DET
PB AMP
CLAMP DET
EE/VV SW
L.P.F.
LIM
Q99
2SB641
Q67
2SD639
Q68
2SB643
Q69
2SD639
Q70
2SB643
Q71
2SD636
Q72
2SD636
LINE C LEV
Q73
2SD636
Q74
2SD636
Q75
2SD636
Q76
2SD636
QR 2
UN1213
(S-VHS Ⓗ: ON)
QR 1
UN1213
(EE Ⓗ: OFF)
QR 4
UN1213
(S-VHS Ⓘ: OFF)
QR 3
UN1213
(EE Ⓘ: OFF)
TP30020
2.0Vp-p S-VHS REC/PLAY
2.0Vp-p VHS REC/PLAY
TP30022
2.0Vp-p S-VHS REC/PLAY
2.0Vp-p VHS REC/PLAY
TP30021
1.4Vp-p S-VHS/VHS REC/PLAY
TP30023
1.0Vp-p S-VHS REC/PLAY
1.0Vp-p VHS REC/PLAY
Q102
2SD636
Q100
2SA1254
Q101
2SC2206
Q103
2SB641
VIDEO SUB C.B.A. (VEP00N06A) REF. NO. 30000 SERIES
TP30013
0.44Vp-p S-VHS REC/PLAY
0.36Vp-p VHS REC/PLAY
IC 65
TA7346P (B/W COLOUR SELECT)
LOG
Q87
2SD636
Q88
2SD636
DL54
50n sec DEL.
Q89
2SC2206
Q90
2SD636
4P C LEV
Q79
2SC2206
(Y/C FILTER ON Ⓗ: ON)
QR 5
UN1212
(REC/PLAY Ⓖ: OFF)
QR 6
UN1213
(SS Ⓖ: OFF)
QR 7
UN1212
(S-VHS Ⓖ: OFF)
QR 8
UN1213
(EDIT ON Ⓖ: OFF)
IC 60
MN3106
(17.7MHz GEN.)
X4 PLL
FL57
FL58
4.43MHz L.P.F.
FL59
6MHz L.P.F
IC 61
MN3802
(CCD 1H DELAY)
SAMPLING BUFFER
CCD IN
Q78
2SB641
FL60
L.P.F.
CCD CIRCUIT
G-LINE
H-LINE
F-LINE
TP30024
0.8Vp-p S-VHS REC/PLAY
0.8Vp-p VHS REC/PLAY
15
16
17
18
19
20
21
22
23
24
25
26
A
B
C
D
E
F
G

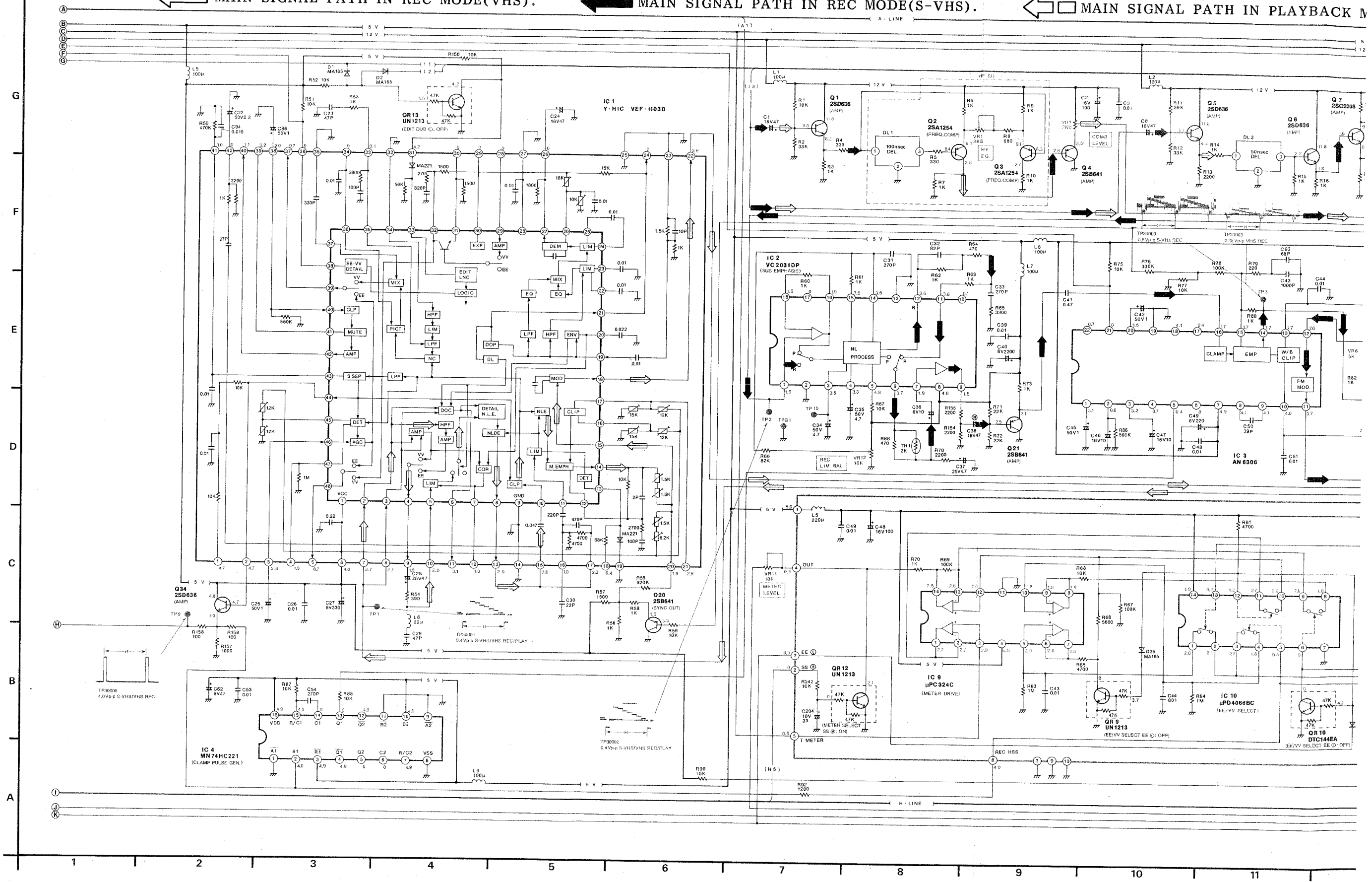
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

REF. NO. 30000 SERIES

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

VIDEO SCHEMATIC DIAGRAM (2/2)

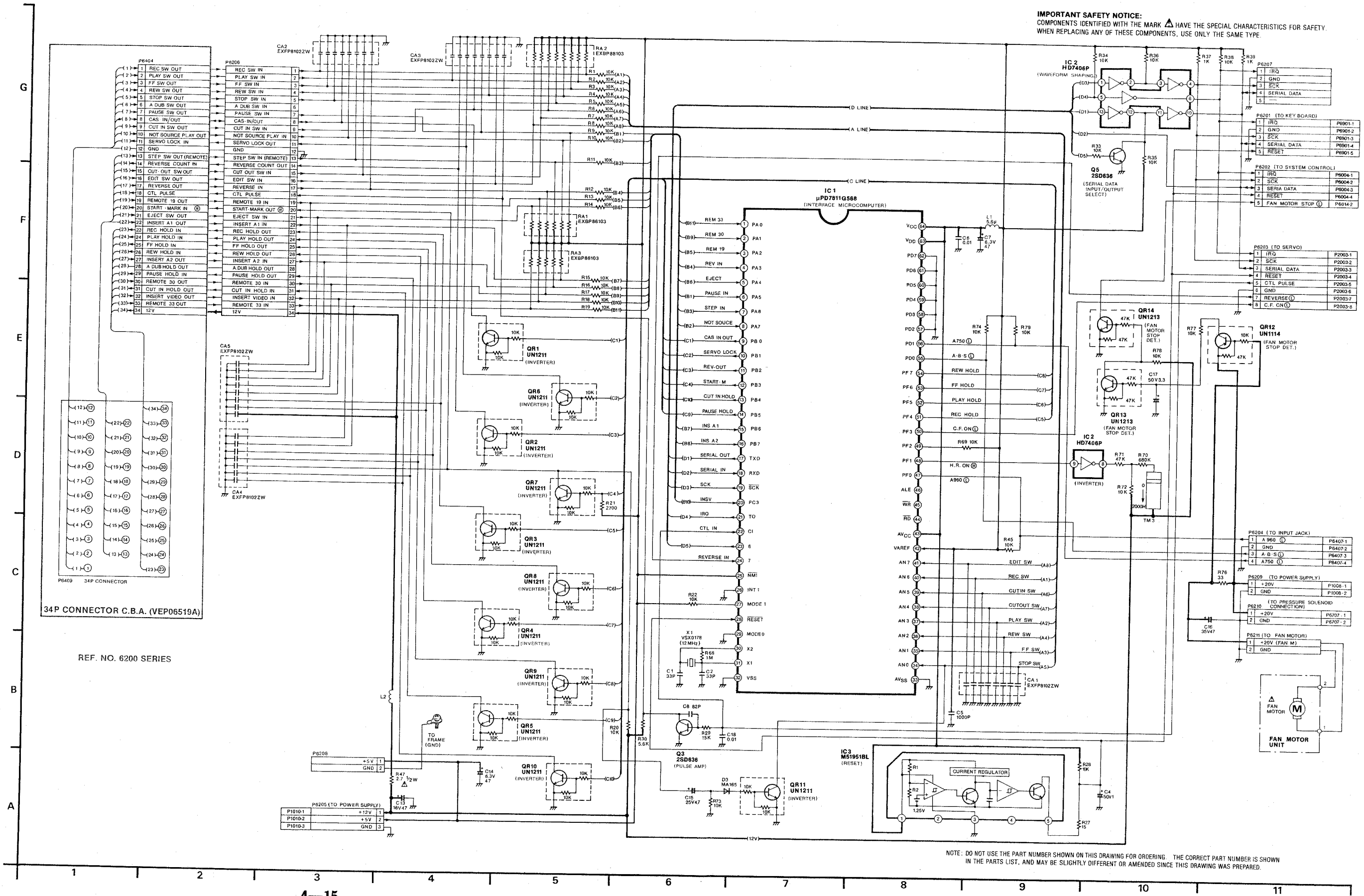
⇦ MAIN SIGNAL PATH IN REC MODE(VHS). ⬅ MAIN SIGNAL PATH IN REC MODE(S-VHS). ⇦□ MAIN SIGNAL PATH IN PLAYBACK M



A
B
C
D
E
F
G
H
I
J
K
5 V
12 V
A - LINE
H - LINE
IC 1
Y-HIC VEF-H03D
QR13
UN1213
(EDIT DUB ⓘ: OFF)
D1 MA165
D2 MA165
R150 10K
EE-VV DETAIL
MIX
EDIT LNC
LOGIC
CLP
MUTE
AMP
S.SEP
LPF
HPF
LIM
PICT
NC
EXP
DEM
EQ
DOP
DL
ENV
MOD
DOC
DETAIL N.L.E.
NLE
NLDE
CLIP
AGC
DET
COR
M.EMPH
VCC
GND
Q34
2SD636
(AMP)
TP9
TP30000
4.0Vp-p S-VHS/VHS REC
TP1
TP30001
0.4Vp-p S-VHS/VHS REC/PLAY
TP30002
0.4Vp-p S-VHS/VHS REC/PLAY
Q20
2SB641
(SYNC OUT)
IC 4
MN74HC221
(CLAMP PULSE GEN.)
VDD R/C1 C1 Q1 Q2 R2 B2 A2
A1 B1 R1 Q1 Q2 C2 R/C2 VSS
Q1
2SD636
(AMP)
Q2
2SA1254
(FREQ.COMP)
Q3
2SA1254
(FREQ.COMP)
Q4
2SB641
(AMP)
DL 1
100nsec DEL.
HF EQ
COMB LEVEL
Q5
2SD636
(AMP)
Q6
2SD636
(AMP)
Q7
2SC2208
(AMP)
DL 2
50nsec DEL.
TP30003
0.6Vp-p S-VHS REC
TP30003
0.38Vp-p VHS REC
IC 2
VC2031DP
(SUB EMPHASIS)
NL PROCESS
TP2
TPG1
TP10
REC LIM BAL
Q21
2SB641
(AMP)
IC 3
AN6306
CLAMP
EMP
W/B CLIP
FM MOD.
TP3
VR11 10K
METER LEVEL
OUT
EE ⓘ
SS ⓘ
T METER
QR12
UN1213
(METER SELECT SS ⓘ: ON)
IC 9
μPC324C
(METER DRIVE)
D26 MA165
QR 9
UN1213
(EE/VV SELECT EE ⓘ: OFF)
IC 10
μPD4066BC
(EE/VV SELECT)
QR 10
DTC144EA
(EE/VV SELECT EE ⓘ: OFF)
REC HSS
(H 5)
(A 1)
1
2
3
4
5
6
7
8
9
10
11

INTERFACE & 34P CONNECTOR SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

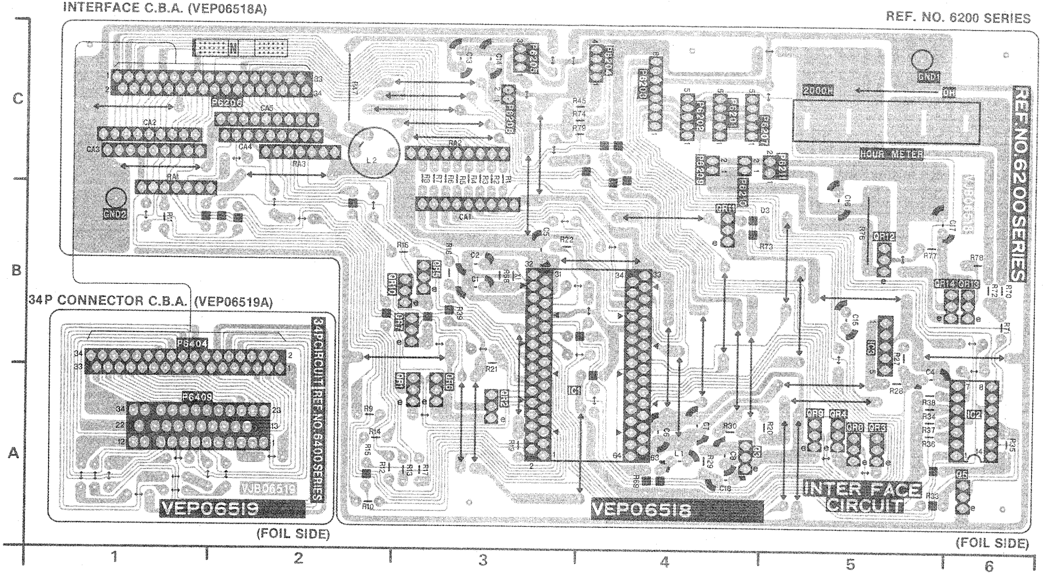

G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
P6404
1 REC SW OUT
2 PLAY SW OUT
3 FF SW OUT
4 REW SW OUT
5 STOP SW OUT
6 A DUB SW OUT
7 PAUSE SW OUT
8 CAS IN/OUT
9 CUT IN SW OUT
10 NOT SOURCE PLAY OUT
11 SERVO LOCK IN
12 GND
13 STEP SW OUT (REMOTE)
14 REVERSE COUNT IN
15 CUT-OUT SW OUT
16 EDIT SW OUT
17 REVERSE OUT
18 CTL PULSE
19 REMOTE 19 OUT
20 START-MARK IN Ⓗ
21 EJECT SW OUT
22 INSERT A1 OUT
23 REC HOLD IN
24 PLAY HOLD IN
25 FF HOLD IN
26 REW HOLD IN
27 INSERT A2 OUT
28 A DUB HOLD OUT
29 PAUSE HOLD IN
30 REMOTE 30 OUT
31 CUT IN HOLD OUT
32 INSERT VIDEO OUT
33 REMOTE 33 OUT
34 12V
P6206
REC SW IN
PLAY SW IN
FF SW IN
REW SW IN
STOP SW IN
A DUB SW IN
PAUSE SW IN
CAS-IN/OUT
CUT IN SW IN
NOT SOURCE PLAY IN
SERVO LOCK OUT
GND
STEP SW IN (REMOTE)
REVERSE COUNT OUT
CUT OUT SW IN
EDIT SW IN
REVERSE IN
CTL PULSE
REMOTE 19 IN
START-MARK OUT Ⓗ
EJECT SW IN
INSERT A1 IN
REC HOLD OUT
PLAY HOLD OUT
FF HOLD OUT
REW HOLD OUT
INSERT A2 IN
A.DUB HOLD OUT
PAUSE HOLD OUT
REMOTE 30 IN
CUT IN HOLD IN
INSERT VIDEO IN
REMOTE 33 IN
12V
P6409 34P CONNECTOR
34P CONNECTOR C.B.A. (VEP06519A)
REF. NO. 6200 SERIES
CA2 EXFP8102ZW
CA3 EXFP8102ZW
CA5 EXFP8102ZW
CA4 EXFP8102ZW
RA2 EXBP88103
RA1 EXBP88103
RA3 EXBP88103
R1–R19 10K
D LINE
A LINE
C LINE
QR1 UN1211 (INVERTER)
QR2 UN1211 (INVERTER)
QR3 UN1211 (INVERTER)
QR4 UN1211 (INVERTER)
QR5 UN1211 (INVERTER)
QR6 UN1211 (INVERTER)
QR7 UN1211 (INVERTER)
QR8 UN1211 (INVERTER)
QR9 UN1211 (INVERTER)
QR10 UN1211 (INVERTER)
QR11 UN1211 (INVERTER)
R21 2700
L2
TO FRAME (GND)
P6208
+5V 1
GND 2
R47 2.7 ½W ⚠
C13 16V47
C14 6.3V 47
P6205 (TO POWER SUPPLY)
P1010-1 +12V 1
P1010-2 +5V 2
P1010-3 GND 3
R20 10K
R30 5.6K
C8 82P
R29 15K
C18 0.01
Q3 2SD636 (PULSE AMP)
C15 25V4.7
R73 10K
D3 MA165
(12V)
IC 1
μPD7811G568
(INTERFACE MICROCOMPUTER)
REM 33 1 PA0
REM 30 2 PA1
REM 19 3 PA2
REV IN 4 PA3
EJECT 5 PA4
PAUSE IN 6 PA5
STEP IN 7 PA6
NOT SOUCE 8 PA7
CAS IN OUT 9 PB0
SERVO LOCK 10 PB1
REV-OUT 11 PB2
START-M 12 PB3
CUT IN HOLD 13 PB4
PAUSE HOLD 14 PB5
INS A1 15 PB6
INS A2 16 PB7
SERIAL OUT 17 TXD
SERIAL IN 18 RXD
SCK 19 SCK
INSV 20 PC3
IRQ 21 TO
CTL IN 22 CI
23 6
REVERSE IN 24 7
25 NMI
26 INT1
R22 10K 27 MODE 1
28 RESET
29 MODE0
X1 VSX0178 (12MHz)
R68 1M
C1 33P
C2 33P
30 X2
31 X1
32 VSS
VCC 64
VDD 63
PD7 62
PD6 61
PD5 60
PD4 59
PD3 58
PD2 57
PD1 56 A750 Ⓛ
PD0 55 A·B·S Ⓛ
PF7 54 REW HOLD
PF6 53 FF HOLD
PF5 52 PLAY HOLD
PF4 51 REC HOLD
PF3 50 C.F. ON Ⓛ
PF2 49 R69 10K
PF1 48 H.R. ON Ⓗ
PF0 47 A960 Ⓛ
ALE 46
WR 45
RD 44
AVCC 43
VAREF 42
AN7 41 EDIT SW
AN6 40 REC SW
AN5 39 CUTIN SW
AN4 38 CUTOUT SW
AN3 37 PLAY SW
AN2 36 REW SW
AN1 35 FF SW
AN0 34 STOP SW
AVSS 33
L1 5.6μ
C6 0.01
C7 6.3V 47
R74 10K
R79 10K
R45 10K
CA1 EXFP8102ZW
C5 1000P
IC3 M51951BL (RESET)
CURRENT REGULATOR
R1
R2
1.25V
R28 10K
R27 15
C4 50V1
IC 2 HD7406P (WAVEFORM SHAPING)
R34 10K
R36 10K
R37 1K
R38 10K
R39 1K
R33 10K
Q5 2SD636 (SERIAL DATA INPUT/OUTPUT SELECT)
R35 10K
P6207
1 IRQ
2 GND
3 SCK
4 SERIAL DATA
5 —
P6201 (TO KEY BOARD)
1 IRQ P6901-1
2 GND P6901-2
3 SCK P6901-3
4 SERIAL DATA P6901-4
5 RESET P6901-5
P6202 (TO SYSTEM CONTROL)
1 IRQ P6004-1
2 SCK P6004-2
3 SERIA DATA P6004-3
4 RESET P6004-4
5 FAN MOTOR STOP Ⓛ P6014-2
P6203 (TO SERVO)
1 IRQ P2003-1
2 SCK P2003-2
3 SERIAL DATA P2003-3
4 RESET P2003-4
5 CTL PULSE P2003-5
6 GND P2003-6
7 REVERSE Ⓛ P2003-7
8 C.F. ON Ⓛ P2003-8
QR14 UN1213 (FAN MOTOR STOP DET.)
QR13 UN1213 (FAN MOTOR STOP DET.)
QR12 UN1114 (FAN MOTOR STOP DET.)
R77 10K
R78 10K
C17 50V3.3
IC 2 HD7406P (INVERTER)
R71 47K
R70 680K
R72 10K
2000H
TM3
P6204 (TO INPUT JACK)
1 A 960 Ⓛ P6407-1
2 GND P6407-2
3 A·B·S Ⓛ P6407-3
4 A750 Ⓛ P6407-4
R76 33
P6209 (TO POWER SUPPLY)
1 +20V P1008-1
2 GND P1008-2
P6210 (TO PRESSURE SOLENOID CONNECTION)
1 +20V P6707-1
2 GND P6707-2
C16 35V47
P6211 (TO FAN MOTOR)
1 +20V (FAN M)
2 GND
⚠ FAN MOTOR
M
FAN MOTOR UNIT

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

INTERFA

REF. NO. / MODE	
	1
STOP	4.9
PLAY	4.9
F.F.	4.9
REF. NO. / MODE	21
STOP	0.3
PLAY	0.3
F.F.	0.3
REF. NO. / MODE	41
STOP	4.9
PLAY	4.9
F.F.	4.9
REF. NO. / MODE	61
STOP	0
PLAY	0
F.F.	0
REF. NO. / MODE	1
STOP	1.7
PLAY	3.6
F.F.	1.7

INTERFACE C.B.A. (VEP06518A) & 34P CONNECTOR C.B.A. (VEP06519A)


INTERFACE C.B.A. (VEP06518A)
REF. NO. 6200 SERIES
34P CONNECTOR C.B.A. (VEP06519A)
C
B
A
1
2
3
4
5
6
P6206
P6404
P6409
CA1
CA2
CA3
CA4
CA5
RA1
RA2
RA3
L2
GND1
GND2
HOUR METER
IC1
IC2
IC3
REF.NO.6200SERIES
34P CIRCUIT REF.NO.6200 SERIES
VEP06519
VEP06518
INTER FACE CIRCUIT
(FOIL SIDE)
(FOIL SIDE)

Interface & 34P Connector C.B.A.	
Transistor	
Q6203	A-4
Q6205	A-6
Transistor & Resistor	
QR6201	A-3
QR6202	A-3
QR6203	A-5
QR6204	A-5
QR6205	B-3
QR6206	A-3
QR6207	B-3
QR6208	A-5
QR6209	A-5
QR6210	B-3
QR6211	B-4
QR6212	B-5
QR6213	B-6
QR6214	B-6
Integrated Circuit	
IC6201	C-3
IC6202	A-6
IC6203	B-5
Connector	
P6201	C-4
P6202	C-4
P6203	C-4
P6204	C-4
P6205	C-3
P6206	C-2
P6207	C-4
P6208	C-3
P6209	C-4
P6210	B-4
P6211	C-4
P6404	B-1
P6409	A-1

ADDRESS INFORMATION

INTERFACE ICs DC VOLTAGE CHART

REF. NO.	IC6201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.5	0	3.5	4.1	0	0	4.9	4.9	3.0	3.6	3.6	4.9
PLAY	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.5	3.5	3.5	4.1	0	0	4.9	4.9	3.0	3.6	3.6	4.9
F.F.	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.5	0	0	4.1	0	0	4.9	4.9	3.0	3.7	3.6	4.9

REF. NO.	IC6201																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0.3	0	2.3	4.9	5.0	0	3.2	4.9	0	0.7	1.6	0	0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
PLAY	0.3	0.1	2.3	4.9	5.0	0	3.2	4.9	0	0.7	1.6	0	0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
F.F.	0.3	0.1	2.3	4.9	5.0	0	3.2	4.9	0	0.7	1.6	0	0	4.9	4.9	4.9	4.9	4.9	4.9	4.9

REF. NO.	IC6201																			
MODE	41	42	43	44	45	46	47	48	490	50	51	52	53	54	55	56	57	58	59	60
STOP	4.9	5.0	4.9	3.8	3.8	0.8	4.9	1.7	4.9	4.9	0	0	0	0	4.9	0	0	0	0	0
PLAY	4.9	4.9	4.9	3.8	3.8	0.7	4.9	3.8	4.9	4.9	0	3.5	0	0	4.9	0	0	0	0	0
F.F.	4.9	4.9	4.9	3.8	3.8	0.7	4.9	0	4.9	4.9	0	0	0	0	4.9	0	0	0	0	0

REF. NO.	IC6201																			
MODE	61	62	63	64																
STOP	0	0	4.9	4.9																
PLAY	0	0	4.9	4.9																
F.F.	0	0	4.9	4.9																

REF. NO.	IC6202															IC6203				
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14		1	2	3	4	5
STOP	1.7	0.1	0.1	4.9	4.9	0.1	0	0.1	1.7	4.9	0.1	0.1	1.7	4.9		4.9	0	0	0	4.9
PLAY	3.6	0.1	0.1	4.8	0.3	4.7	0	0.1	3.8	3.7	1.2	1.0	3.0	4.9		4.9	0	0	0	4.9
F.F.	1.7	0.1	0.1	4.9	4.9	0.1	0	0.1	1.7	4.9	0.1	0.1	1.7	4.9		4.9	0	0	0	4.9

MEASUREMENT TAPE...S-VHS CASSETTE TAPE

INTERFACE TRANSISTORs DC VOLTAGE CHART

REF. NO.	Q6203			Q6205																
MODE	E	C	B	E	C	B														
STOP	0	11.9	0	0	1.1	0.4														
PLAY	0	11.9	0.1	0	1.1	0.4														
F.F.	0	9.3	0.1	0	0.9	0.4														

REF. NO.	QR6201			QR6202			QR6203			QR6204			QR6205			QR6206		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	3.5	0	0	3.5	0	0.2	0	0	0.2	0	0	0.3	0	0	0.3	0
PLAY	0	0	3.5	0	0.4	0	0	0.2	0	0	0.2	0	0	0.3	0	0	0	3.5
F.F.	0	0	3.5	0	0.3	0	0	0.3	0	0	0	3.5	0	0.2	0	0	0.3	0

REF. NO.	QR6207			QR6208			QR6209			QR6210			QR6211			QR6212		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	4.1	0	0.2	0	0	0.3	0	0	0.2	0	0	4.9	0	21.5	21.5	19.3
PLAY	0	0	4.1	0	0.	3.5	0	0.2	0	0	0.2	0	0	4.9	0	20.3	20.3	18.2
F.F.	0	0	4.1	0	0.2	0	0	0.2	0	0	0.2	0	0	4.9	0	21.3	21.3	19.1

REF. NO.	QR6213			QR6214														
MODE	E	C	B	E	C	B												
STOP	0	0	17.2	0	4.1	0												
PLAY	0	0	16.3	0	4.1	0												
F.F.	0	0	17.1	0	4.1	0												

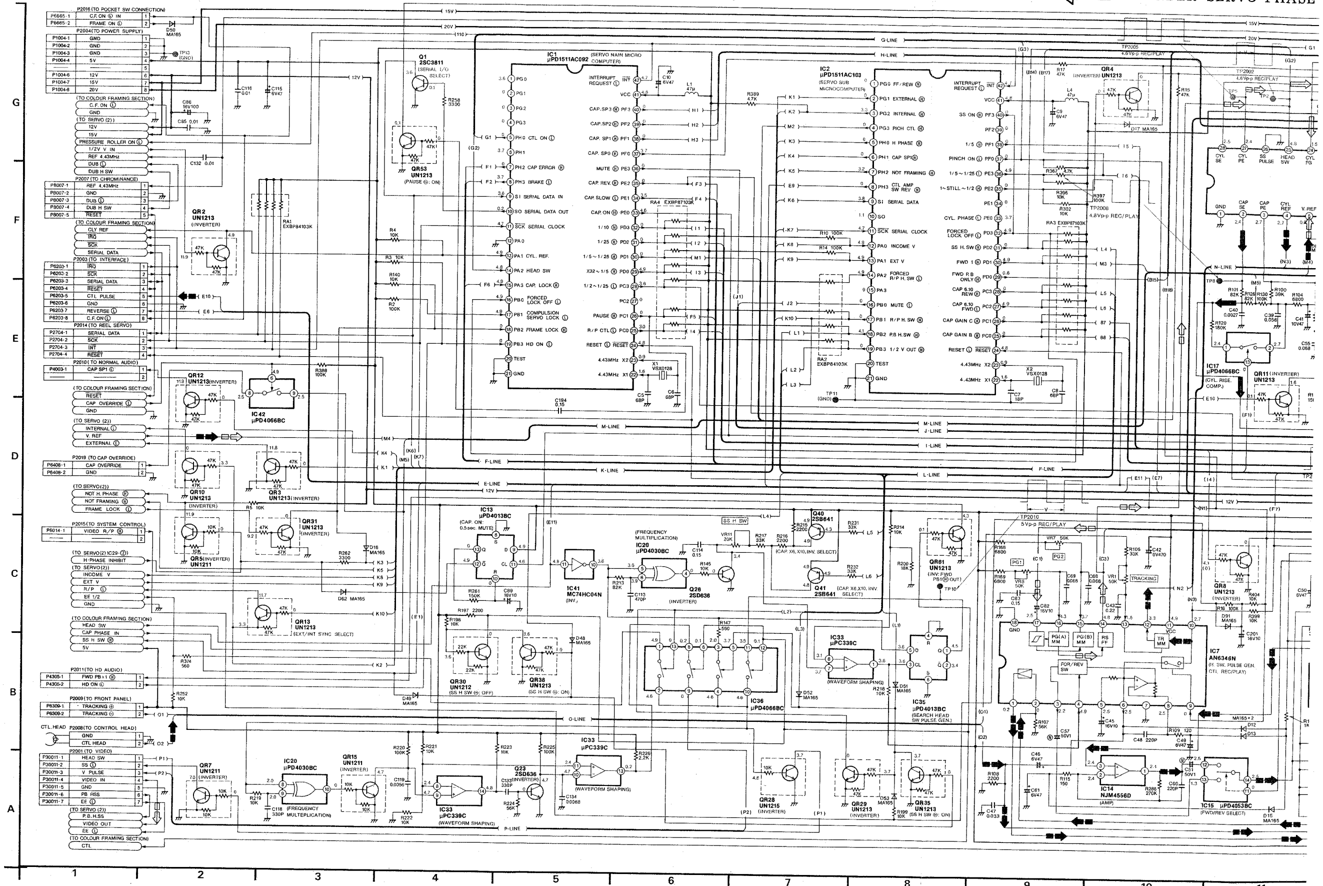
MEASUREMENT TAPE...S-VHS CASSETTE TAPE

SERVO (1) SCHEMATIC DIAGRAM

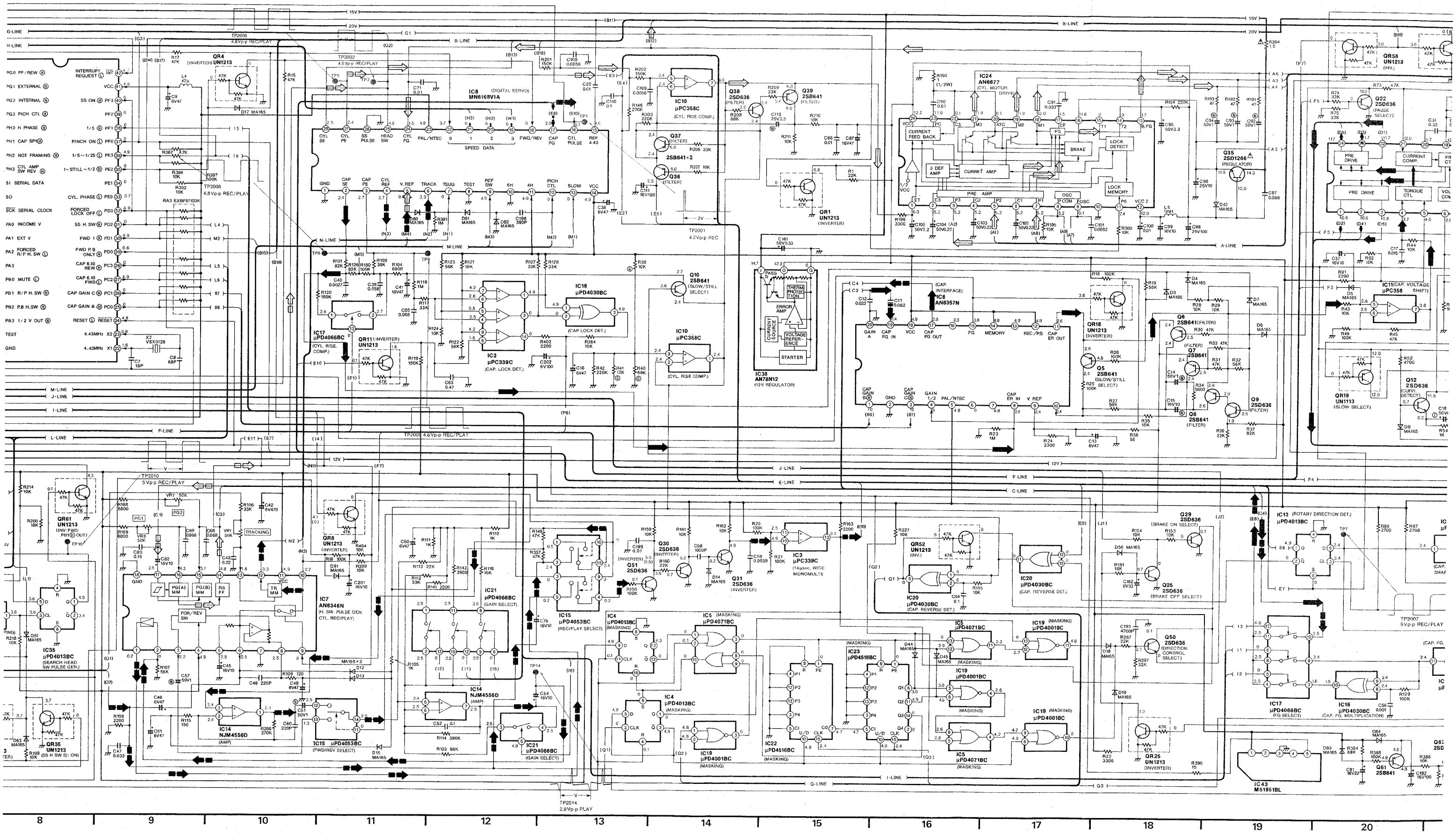
CYLINDER SERVO SPEED LOOP.

CAPSTAN SERVO SPEED LOOP.

CYLINDER SERVO PHASE

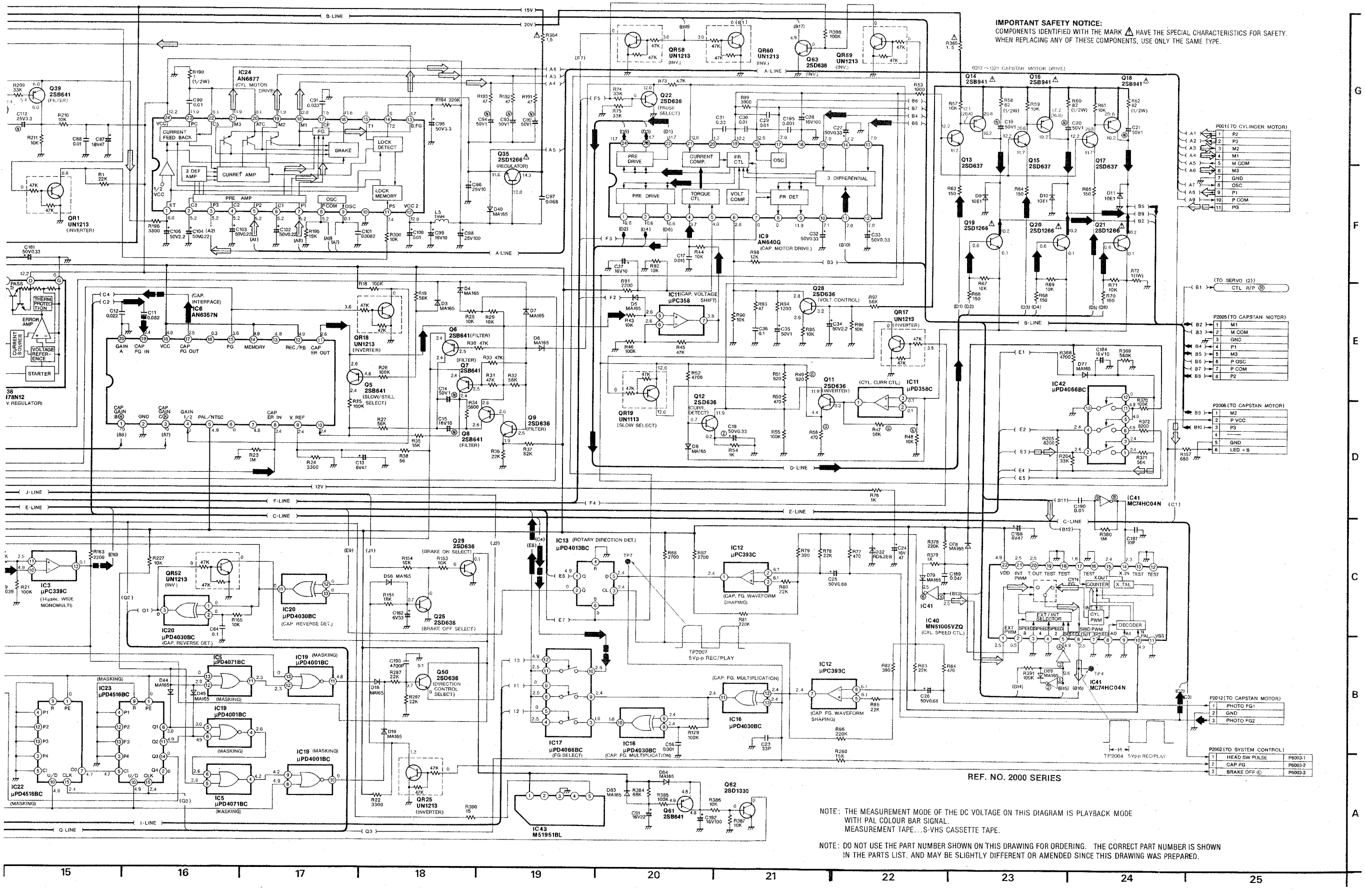

IC1
μPD1511AC092
(SERVO MAIN MICRO COMPUTER)
IC2
μPD1511AC103
(SERVO SUB MICROCOMPUTER)
Q1
2SC3811
(SERIAL I/O SELECT)
QR53
UN1213
(PAUSE Ⓗ: ON)
QR2
UN1213
(INVERTER)
RA1
EXBP84103K
RA4 EXBP87103K
RA2
EXBP84103K
RA3 EXBP87103K
X1
VSX0128
X2
VSX0128
QR4
UN1213
QR12
UN1213(INVERTER)
IC42
μPD4066BC
QR10
UN1213
(INVERTER)
QR3
UN1213(INVERTER)
QR5(INVERTER)
UN1211
QR31
UN1213
(INVERTER)
QR13
UN1213
(EXT/INT SYNC SELECT)
IC13
μPD4013BC
(CAP. ON: 0.5sec MUTE)
IC41
MC74HC04N
(INV.)
IC20
μPD4030BC
(FREQUENCY MULTIPLICATION)
Q26
2SD636
(INVERTER)
Q40
2SB641
Q41
2SB641
QR81
UN1213
(INV.FWD PB1Ⓗ OUT)
QR30
UN1212
(SS H SW Ⓗ: OFF)
QR38
UN1213
(SC H SW Ⓗ: ON)
IC33
μPC339C
(WAVEFORM SHAPING)
IC36
μPD4066BC
IC35
μPD4013BC
(SEARCH HEAD SW PULSE GEN.)
QR7
UN1211
(INVERTER)
QR15
UN1211
(INVERTER)
Q23
2SD636
(INVERTER)
QR28
UN1215
(INVERTER)
QR29
UN1213
(INVERTER)
QR35
UN1213
(SS H SW Ⓗ: ON)
IC7
AN6348N
(H. SW. PULSE GEN. CTL. REC/PLAY)
IC14
NJM4556D
(AMP)
IC15 μPD4053BC
(FWD/REV SELECT)
IC17
μPD4066BC
(CYL. RISE. COMP.)
QR11 (INVERTER)
UN1213
QR8
UN1213
(INVERTER)
TP2010
5Vp-p REC/PLAY
TP2005
4.6Vp-p REC/PLAY
TP2008
4.8Vp-p REC/PLAY
TRACKING
G-LINE
H-LINE
M-LINE
J-LINE
I-LINE
F-LINE
K-LINE
L-LINE
E-LINE
O-LINE
P-LINE
15V
20V
12V
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

RVO SPEED LOOP. ⇦☐ CYLINDER SERVO PHASE LOOP. ⬅■ CAPSTAN SERVO PHASE LOOP.


IC8 MN6168VIA (DIGITAL SERVO)
IC10 μPC358C (CYL. RISE COMP.)
Q38 2SD636 (FILTER)
Q39 2SB641 (FILTER)
Q37 (FILTER)
2SB641×2
Q36 (FILTER)
QR1 UN1213 (INVERTER)
IC24 AN6677 (CYL. MOTOR DRIVE)
Q35 2SD1266 (REGULATOR)
QR58 UN1213 (INV.)
Q22 2SD636 (PAUSE SELECT)
QR4 UN1213 (INVERTER)
IC17 μPD4066BC (CYL. RISE COMP.)
QR11 UN1213 (INVERTER)
IC3 μPC339C (CAP. LOCK DET.)
IC16 μPD4030BC (CAP LOCK DET.)
Q10 2SB641 (SLOW/STILL SELECT)
IC10 μPC358C (CYL. RISE COMP.)
IC38 AN78N12 (12V REGULATOR)
IC6 AN6357N (CAP. INTERFACE)
QR18 UN1213 (INVERTER)
Q5 2SB641 (SLOW/STILL SELECT)
Q6 2SB641 (FILTER)
Q7 2SB641
Q8 2SB641 (FILTER)
Q9 2SD636 (FILTER)
IC11 μPC358 (CAP. VOLTAGE SHIFT)
QR19 UN1113 (SLOW SELECT)
Q12 2SD636 (CURR. DETECT)
QR61 UN1213 (INV. FWD PB10 OUT)
IC35 μPD4013BC (SEARCH HEAD SW PULSE GEN.)
QR35 UN1213 (SS H SW Ⓢ: ON)
IC7 AN6346N (H. SW. PULSE GEN. CTL. REC/PLAY)
QR8 UN1213 (INVERTER)
IC14 NJM4556D (AMP)
IC15 μPD4053BC (FWD/REV SELECT)
IC21 μPD4066BC (GAIN SELECT)
IC15 μPD4053BC (REC/PLAY SELECT)
Q51 2SD636 (INVERTER)
Q30 2SD636 (INVERTER)
Q31 2SD636 (INVERTER)
IC3 μPC339C (14μsec. WIDE MONOMULTI)
IC4 μPD4013BC (MASKING)
IC5 μPD4071BC (MASKING)
IC19 μPD4001BC (MASKING)
IC22 μPD4516BC (MASKING)
IC23 μPD4516BC (MASKING)
QR52 UN1213 (INV.)
IC20 μPD4030BC (CAP. REVERSE DET.)
Q29 2SD636 (BRAKE ON SELECT)
Q25 2SD636 (BRAKE OFF SELECT)
Q50 2SD636 (DIRECTION CONTROL SELECT)
QR25 UN1213 (INVERTER)
IC13 μPD4013BC (ROTARY DIRECTION DET.)
IC17 μPD4066BC (FG SELECT)
IC16 μPD4030BC (CAP. FG. MULTIPLICATION)
IC43 M51951BL
Q61 2SB641
TP2001 4.2Vp-p REC
TP2002 4.8Vp-p REC/PLAY
TP2005 4.8Vp-p REC/PLAY
TP2006 4.8Vp-p REC/PLAY
TP2008 4.8Vp-p REC/PLAY
TP2010 5Vp-p REC/PLAY
TP2014 2.8Vp-p PLAY
TP2007 5Vp-p REC/PLAY
B-LINE
A-LINE
C-LINE
E-LINE
F-LINE
I-LINE
J-LINE
L-LINE
M-LINE
N-LINE
Q-LINE
8
9
10
11
12
13
14
15
16
17
18
19
20

OP.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.


B-LINE
A-LINE
C-LINE
D-LINE
E-LINE
F-LINE
J-LINE
I-LINE
Q-LINE
15V
20V
12V
IC24 AN6677 (CYL. MOTOR DRIVE)
Q35 2SD1266 (REGULATOR)
QR1 UN1213 (INVERTER)
Q39 2SB641 (FILTER)
IC6 AN6357N (CAP. INTERFACE)
QR18 UN1213 (INVERTER)
Q5 2SB641 (SLOW/STILL SELECT)
Q6 2SB641 (FILTER)
Q7 2SB641 (FILTER)
Q8 2SB641 (FILTER)
Q9 2SD636 (FILTER)
QR58 UN1213 (INV.)
QR60 UN1213 (INV.)
Q63 2SD638 (INV.)
QR59 UN1213 (INV.)
Q22 2SD636 (PAUSE SELECT)
IC9 AN640G (CAP. MOTOR DRIVE)
IC11 µPC358 (CAP. VOLTAGE SHIFT)
Q28 2SD636 (VOLT CONTROL)
QR17 UN1213 (INVERTER)
QR19 UN1113 (SLOW SELECT)
Q12 2SD636 (CURR. DETECT)
Q11 2SD636 (INVERTER)
IC11 µPD358C (CYL. CURR CTL)
(Q13 ~ Q21: CAPSTAN MOTOR DRIVE)
Q14 2SB941
Q16 2SB941
Q18 2SB941
Q13 2SD637
Q15 2SD637
Q17 2SD637
Q19 2SD1266
Q20 2SD1266
Q21 2SD1266
P001 (TO CYLINDER MOTOR)
P2005 (TO CAPSTAN MOTOR)
P2006 (TO CAPSTAN MOTOR)
IC42 µPD4066BC
(TO SERVO (2)) CTL R/P
IC41 MC74HC04N
IC40 MN51005VZQ (CYL. SPEED CTL)
IC3 µPC339C (14 µsec. WIDE MONOMULTI)
QR52 UN1213 (INV.)
IC20 µPD4030BC (CAP. REVERSE DET.)
Q29 2SD636 (BRAKE ON SELECT)
Q25 2SD636 (BRAKE OFF SELECT)
IC13 µPD4013BC (ROTARY DIRECTION DET.)
TP7
IC12 µPC393C (CAP. FG. WAVEFORM SHAPING)
TP2007 5Vp-p REC/PLAY
IC22 µPD4516BC (MASKING)
IC23 µPD4516BC
IC5 µPD4071BC
IC19 µPD4001BC (MASKING)
Q50 2SD636 (DIRECTION CONTROL SELECT)
IC17 µPD4066BC (FG SELECT)
IC16 µPD4030BC (CAP. FG. MULTIPLICATION)
QR25 UN1213 (INVERTER)
IC43 M51951BL
Q61 2SB641
Q62 2SD1330
P2012 (TO CAPSTAN MOTOR)
PHOTO FG1
GND
PHOTO FG2
TP2004 5Vp-p REC/PLAY
P2002 (TO SYSTEM CONTROL)
HEAD SW PULSE
CAP FG
BRAKE OFF
G
F
E
D
C
B
A
15
16
17
18
19
20
21
22
23
24
25

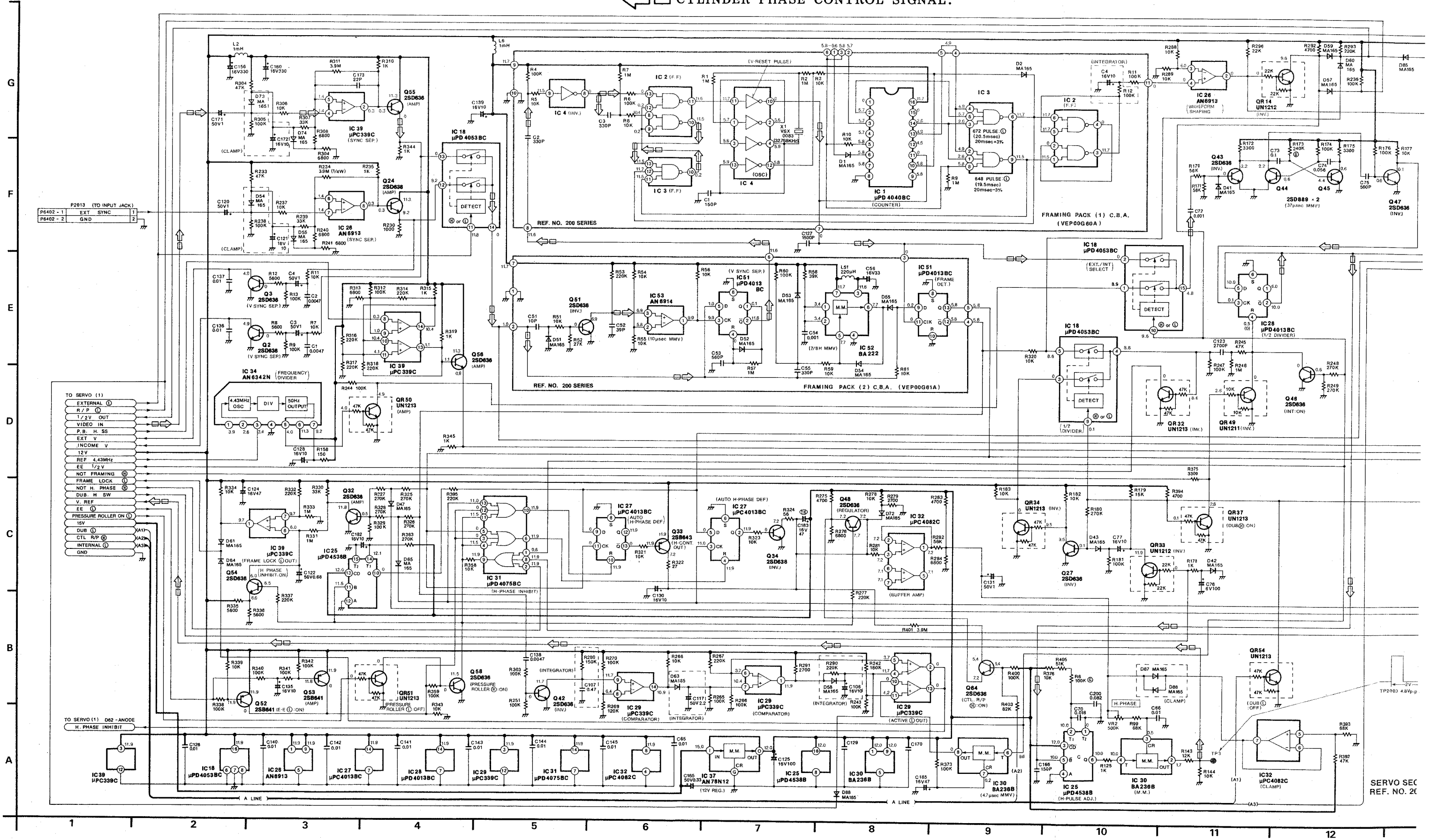
REF. NO. 2000 SERIES

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE
WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

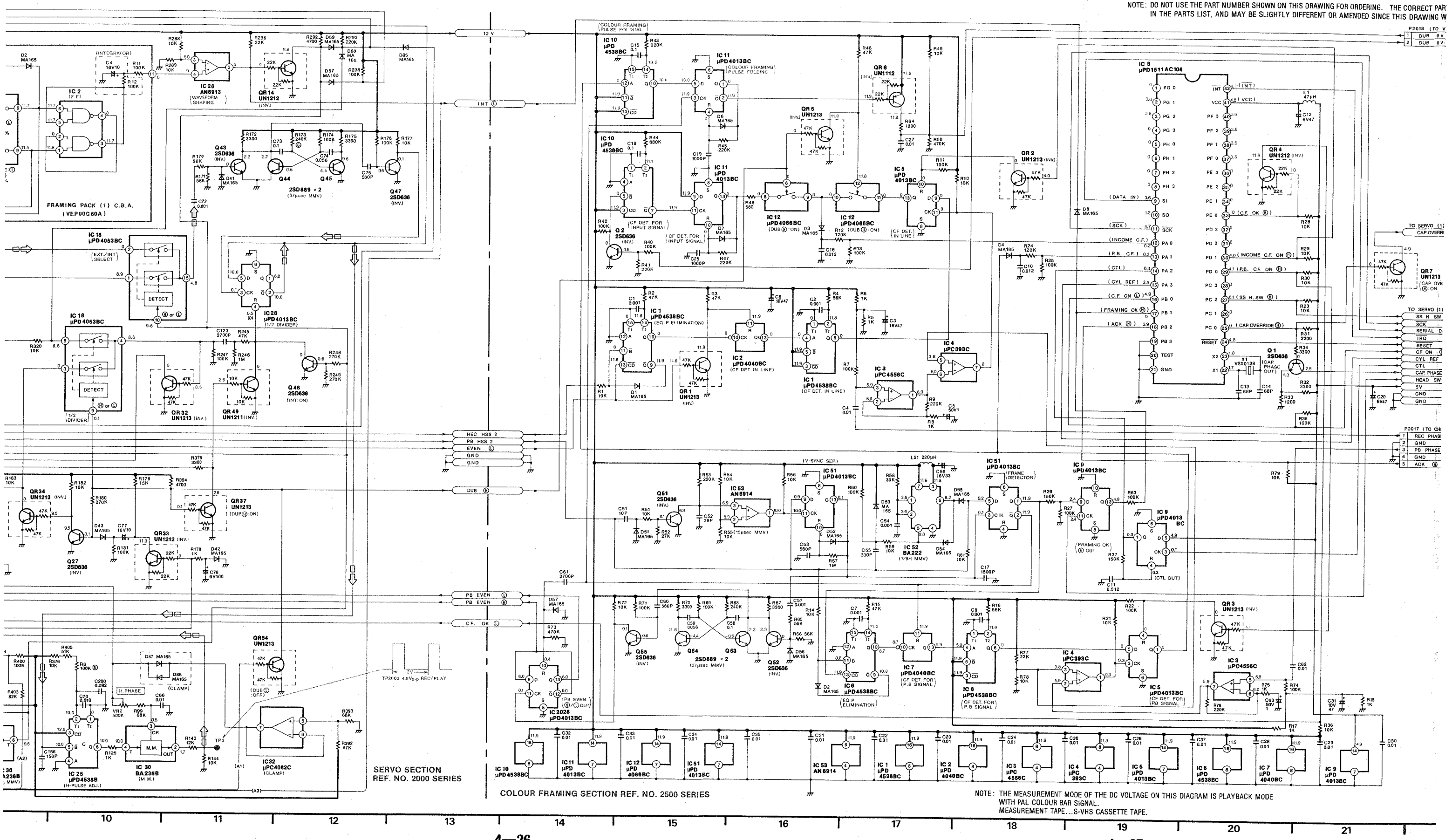
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

SERVO (2) & COLOUR FRAMING SCHEMATIC DIAGRAM

⇦□ CYLINDER PHASE CONTROL SIGNAL.


IC 39 µPC339C (SYNC SEP.)
IC 28 AN6913 (SYNC SEP.)
Q55 2SD636 (AMP)
Q24 2SD636 (AMP)
P2013 (TO INPUT JACK)
P6402-1 EXT SYNC
P6402-2 GND
IC 18 µPD4053BC
IC 4 (INV.)
IC 2 (F.F)
IC 3 (F.F)
IC 4 (OSC)
(V-RESET PULSE)
X1 VSX 0083 (32.768KHz)
IC 1 µPD4040BC (COUNTER)
IC 3
672 PULSE:Ⓛ (20.5msec) 20msec+3%
648 PULSE:Ⓛ (19.5msec) 20msec-3%
IC 2 (F.F)
(INTEGRATOR)
IC 26 AN6913 (WAVEFORM SHAPING)
QR 14 UN1212 (INV.)
Q43 2SD636 (INV.)
Q44
Q45
2SD889 × 2 (37µsec MMV)
Q47 2SD636 (INV.)
REF. NO. 200 SERIES
FRAMING PACK (1) C.B.A. (VEP00G60A)
Q3 2SD636 (V SYNC SEP.)
Q2 2SD636 (V SYNC SEP.)
Q51 2SD636 (INV.)
IC 53 AN6914 (10µsec MMV)
IC51 µPD4013BC (V SYNC SEP.)
IC 51 µPD4013BC (FRAME DET.)
IC 52 BA222 (7/8H MMV)
FRAMING PACK (2) C.B.A. (VEP00G61A)
IC 18 µPD4053BC (EXT./INT. SELECT)
IC 28 µPD4013BC (1/2 DIVIDER)
IC 39 µPC339C
Q56 2SD636 (AMP)
IC 34 AN6342N (FREQUENCY DIVIDER)
4.43MHz OSC
DIV
50Hz OUTPUT
QR50 UN1213 (AMP)
IC 18 µPD4053BC (1/2 DIVIDER)
QR32 UN1213 (INV.)
QR 49 UN1211 (INV.)
Q46 2SD636 (INT:ON)
TO SERVO (1)
EXTERNAL Ⓛ
R/P Ⓛ
1/2V OUT
VIDEO IN
P.B. H. SS
EXT V
INCOME V
12V
REF 4.43MHz
EE 1/2V
NOT FRAMING Ⓗ
FRAME LOCK Ⓗ
NOT H. PHASE Ⓗ
DUB. H SW
V. REF
EE Ⓛ
PRESSURE ROLLER ON Ⓛ
15V
DUB Ⓛ
CTL R/P Ⓗ
INTERNAL Ⓛ
GND
IC 39 µPC339C (FRAME LOCK Ⓛ OUT)
Q54 2SD636 (H PHASE INHIBIT:ON)
Q32 2SD636 (AMP)
IC25 µPD4538B
IC 31 µPD4075BC (H-PHASE INHIBIT)
IC 27 µPC4013BC AUTO H-PHASE DEF
Q33 2SB643 (H-CONT OUT)
IC 27 µPC4013BC (AUTO H-PHASE DEF)
Q34 2SD636 (INV.)
Q48 2SD636 (REGULATOR)
IC 32 µPC4082C (BUFFER AMP)
QR34 UN1213 (INV.)
Q27 2SD636 (INV)
QR33 UN1212 (INV)
QR37 UN1213 (DUBⒽ:ON)
Q52 2SB641 (E-E Ⓛ:ON)
Q53 2SB641 (AMP)
QR51 UN1213 (PRESSURE ROLLER Ⓛ:OFF)
Q58 2SD636 (PRESSURE ROLLER Ⓗ:ON)
Q42 2SD636 (INV)
IC 29 µPC339C (COMPARATOR)
(INTEGRATOR)
IC 29 µPC339C (COMPARATOR)
IC 29 µPC339C (ACTIVE Ⓛ OUT)
Q64 2SD636 (CTL. R/P Ⓗ:ON)
IC 30 BA236B (4.7µsec MMV)
H.PHASE
(CLAMP)
QR54 UN1213 (DUB Ⓛ:OFF)
IC 25 µPD4538B (H-PULSE ADJ.)
IC 30 BA236B (M.M.)
IC32 µPC4082C (CLAMP)
TP3
TP2003 4.8Vp-p
TO SERVO (1) D62-ANODE H. PHASE INHIBIT
IC38 µPC339C
IC18 µPD4053BC
IC 28 AN6913
IC 27 µPC4013BC
IC28 µPD4013BC
IC29 µPC339C
IC 31 µPD4075BC
IC 32 µPC4082C
IC 37 AN78N12 (12V REG.)
IC 25 µPD4538B
IC30 BA236B
A LINE
SERVO SEC REF. NO. 2
A B C D E F G
1 2 3 4 5 6 7 8 9 10 11 12

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PAR
IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING W


FRAMING PACK (1) C.B.A. (VEP00G60A)
IC 2 (F.F.)
(INTEGRATOR)
IC 26 AN6913 (WAVEFORM SHAPING)
QR 14 UN1212 (INV.)
Q43 2SD636 (INV.)
Q44
Q45
2SD889 × 2 (37µsec MMV)
Q47 2SD636 (INV.)
IC 18 µPD4053BC (EXT./INT. SELECT)
DETECT
IC 28 µPD4013BC (1/2 DIVIDER)
Q46 2SD636 (INT:ON)
QR 32 UN1213 (INV.)
QR 49 UN1211 (INV.)
QR34 UN1213 (INV.)
Q27 2SD636 (INV.)
QR37 UN1213 (DUB Ⓗ:ON)
QR33 UN1213 (INV.)
QR54 UN1213 (DUB Ⓛ:OFF)
IC 25 µPD4538B (H-PULSE ADJ.)
IC 30 BA238B (M.M.)
H.PHASE
(CLAMP)
IC32 µPC4082C (CLAMP)
TP2003 4.8Vp-p REC/PLAY
SERVO SECTION REF. NO. 2000 SERIES
12 V
INT Ⓛ
REC HSS 2
PB HSS 2
EVEN Ⓛ
GND
DUB Ⓗ
PB EVEN Ⓛ
PB EVEN Ⓗ
C.F. OK Ⓛ
IC 2028 µPD4013BC (PB EVEN Ⓗ/Ⓛ OUT)
COLOUR FRAMING SECTION REF. NO. 2500 SERIES
(COLOUR FRAMING PULSE FOLDING)
IC 10 µPD 4538BC
IC 11 µPD4013BC
QR 6 UN1112
QR 5 UN1213
IC 12 µPD4066BC (DUB Ⓗ:ON)
IC 5 µPD 4013BC (CF DET. IN LINE)
(CF DET. FOR INPUT SIGNAL)
Q 2 2SD636 (INV.)
IC 1 µPD4538BC (EQ.P ELIMINATION)
IC2 µPD4040BC (CF DET. IN LINE)
QR 1 UN1213 (INV.)
IC 1 µPD4538BC (CF DET. IN LINE)
IC 3 µPC4556C
IC 4 µPC393C
QR 2 UN1213 (INV.)
IC 8 µPD1511AC108
QR 4 UN1212 (INV.)
Q 1 2SD636 (CAP PHASE OUT)
X1 VSX0128
QR7 UN1213 (CAP OVE Ⓗ ON)
P2018 (TO V
DUB 0V
TO SERVO (1) CAP.OVERR
TO SERVO (1)
SS H SW
SCK
SERIAL D
IRQ
RESET
CF ON
CYL REF
CTL
CAP. PHASE
HEAD SW
5V
GND
P2017 (TO CH
REC PHASE
PB PHASE
ACK Ⓗ
(V-SYNC SEP)
Q51 2SD636 (INV.)
IC 53 AN6914
IC 51 µPD4013BC
IC 52 BA222 (7/8H MMV)
IC 51 µPD4013BC (FRAME DETECTOR)
IC 9 µPD4013BC
(FRAMING OK Ⓗ OUT)
IC 9 µPD4013 BC (CTL OUT)
Q55 2SD636 (INV.)
Q54
Q53
2SD889 × 2 (37µsec MMV)
Q52 2SD636 (INV.)
IC6 µPD4538BC (EQ.P ELIMINATION)
IC 7 µPD4040BC (CF DET. FOR P.B SIGNAL)
IC 6 µPD4538BC (CF DET. FOR P.B SIGNAL)
IC 4 µPC393C
IC 5 µPD4013BC (CF DET. FOR PB SIGNAL)
QR3 UN1213 (INV.)
IC3 µPC4556C
10
11
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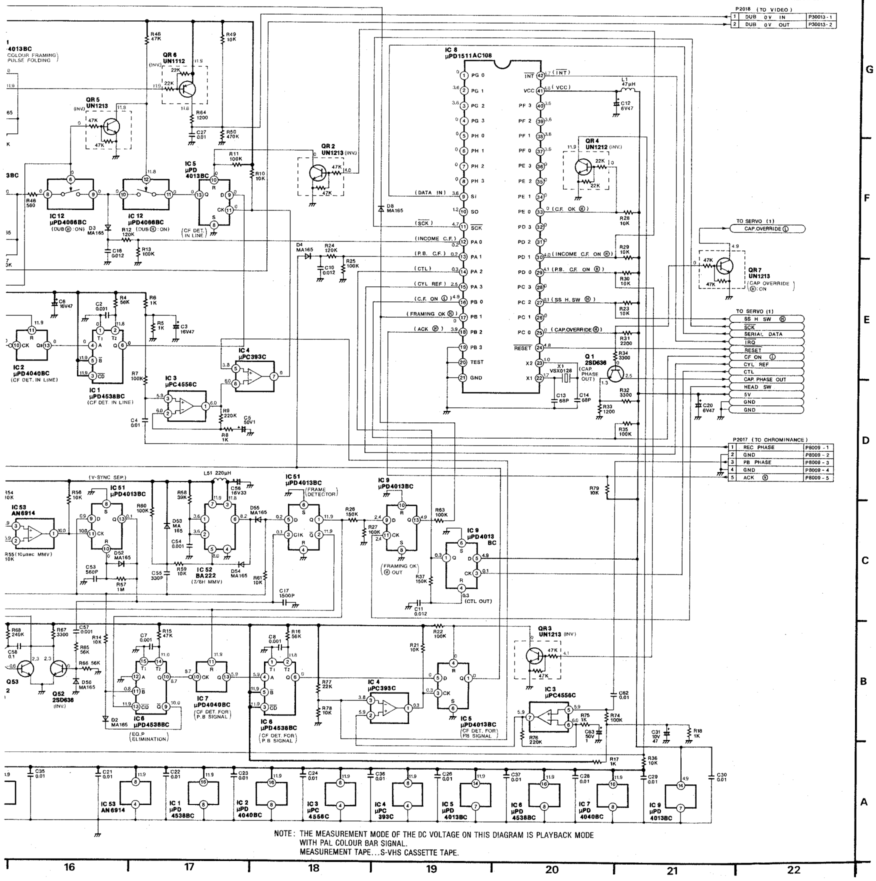
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE
WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE…S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.


P2018 (TO VIDEO)
DUB 0V IN P30013-1
DUB 0V OUT P30013-2
IC 8 µPD1511AC108
4013BC COLOUR FRAMING PULSE FOLDING
QR 6 UN1112
QR 5 UN1213
QR 2 UN1213 (INV.)
QR 4 UN1212 (INV.)
IC 5 µPD 4013BC
IC 12 µPD4066BC (DUB Ⓓ : ON)
IC 12 µPD4066BC (DUB Ⓓ : ON)
IC2 µPD4040BC (CF DET. IN LINE)
IC 1 µPD4538BC (CF DET. IN LINE)
IC 3 µPC4556C
IC 4 µPC393C
Q 1 2SD636
X1 VSX0128
TO SERVO (1) CAP.OVERRIDE Ⓛ
QR7 UN1213 (CAP OVERRIDE Ⓗ : ON)
TO SERVO (1)
SS H SW Ⓗ
SCK
SERIAL DATA
IRQ
RESET
CF ON Ⓛ
CYL REF
CTL
CAP PHASE OUT
HEAD SW
5V
GND
GND
P2017 (TO CHROMINANCE)
REC PHASE P8009-1
GND P8009-2
PB PHASE P8009-3
GND P8009-4
ACK Ⓗ P8009-5
IC 53 AN6914
IC 51 µPD4013BC
IC 52 BA222 (7/8H MMV)
IC 51 µPD4013BC (FRAME DETECTOR)
IC 8 µPD4013BC
IC 9 µPD4013BC
(FRAMING OK) Ⓗ OUT
(CTL OUT)
IC6 µPD4538BC (EQ.P ELIMINATION)
IC 7 µPD4040BC (CF DET. FOR P.B SIGNAL)
IC 6 µPD4538BC (CF DET. FOR P.B SIGNAL)
IC 4 µPC393C
IC 5 µPD4013BC (CF DET. FOR PB SIGNAL)
QR3 UN1213 (INV)
IC 3 µPC4556C
Q53
Q52 2SD636 (INV)
16
17
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G
F
E
D
C
B
A

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

Servo C.B.A. (Servo SEC.), Colour Framing (1)/(2) & Cap Override C.B.A.

Transistor	
Q251	C-10
Q2001	C-4
Q2002	D-3
Q2003	D-3
Q2005	C-5
Q2006	C-6
Q2007	C-6
Q2008	C-6
Q2009	C-6
Q2010	D-7
Q2011	E-7
Q2012	E-7
Q2013	E-7
Q2014	E-7
Q2015	E-7
Q2016	E-7
Q2017	E-8
Q2018	E-8
Q2019	E-6
Q2020	E-6
Q2021	E-5
Q2022	B-4
Q2023	B-5
Q2024	C-2
Q2025	A-5
Q2026	A-6
Q2027	C-2
Q2028	E-8
Q2029	A-5
Q2030	B-7
Q2031	B-7
Q2032	D-1
Q2033	E-2
Q2034	E-2
Q2035	E-8
Q2036	D-5
Q2037	D-5
Q2038	D-5
Q2039	D-5
Q2040	D-4
Q2041	D-4
Q2042	D-1
Q2043	D-2
Q2044	D-2
Q2045	D-2
Q2046	D-2
Q2047	D-2
Q2048	D-2
Q2050	C-5
Q2051	B-7
Q2052	D-1
Q2053	D-1
Q2054	C-2
Q2055	D-3
Q2056	C-3
Q2058	D-1
Q2061	A-9
Q2062	A-8
Q2063	D-2
Q2064	E-2

Transistor & Resistor	
QR2001	B-5
QR2002	D-3
QR2003	E-4
QR2004	D-3
QR2005	D-4
QR2007	C-5
QR2008	A-4
QR2010	E-4
QR2011	B-7
QR2012	D-4
QR2013	E-4
QR2014	C-2
QR2015	A-6
QR2017	E-5
QR2018	D-6
QR2019	E-6
QR2025	A-5
QR2028	C-5
QR2029	B-5
QR2030	B-5
QR2031	C-4
QR2032	D-2
QR2033	C-2
QR2034	C-3
QR2035	B-5
QR2037	D-2
QR2038	B-5
QR2049	D-2
QR2050	C-3
QR2051	B-1
QR2052	A-6
QR2053	B-4
QR2054	B-1
QR2058	A-4
QR2059	D-3
QR2060	A-4
QR2061	C-5

Integrated Circuit	
IC201	B-12
IC202	B-11
IC203	B-12
IC204	B-10
IC251	C-10
IC252	C-11
IC253	C-10
IC2001	B-4
IC2002	E-4
IC2003	B-7
IC2004	A-6
IC2005	A-6
IC2006	D-6
IC2007	B-8
IC2008	D-7
IC2009	D-8
IC2010	D-5
IC2011	E-6
IC2012	B-6
IC2013	B-6
IC2014	A-7
IC2015	A-8
IC2016	C-7
IC2017	B-7
IC2018	D-2
IC2019	B-6
IC2020	A-7
IC2021	A-7
IC2022	A-6
IC2023	A-6
IC2024	C-8
IC2025	E-3
IC2026	C-2
IC2027	D-1
IC2028	D-1
IC2029	E-1
IC2030	D-3
IC2031	C-1
IC2032	E-2
IC2033	B-5
IC2034	D-3
IC2035	B-5
IC2036	B-5
IC2037	E-5
IC2038	D-8
IC2039	C-3
IC2040	C-6
IC2041	D-6
IC2042	D-6
IC2043	D-3

Test Point	
TP2001	D-7
TP2002	D-7
TP2003	E-3
TP2004	D-6
TP2005	D-7
TP2007	B-6
TP2008	D-7
TP2009	C-7
TP2010	C-5
TP2011	D-5
TP2013	E-4
TP2014	B-8

Adjustment	
VR2001	B-8
VR2002	E-1
VR2007	B-8
VR2008	B-8
VR2011	A-5

Connector	
P001	B-8
P2001	C-5
P2002	A-5
P2003	C-4
P2004	D-8
P2005	D-7
P2006	E-8
P2007	C-5
P2008	A-8
P2009	B-7
P2010	D-5
P2011	C-5
P2012	C-7
P2013	C-2
P2014	C-5
P2015	B-5
P2016	C-4
P2019	C-5
P6408	E-1

ADDRESS INFORMATION

Servo C.B.A. (Colour Framing SEC.)

Transistor	
Q2501	A-3
Q2502	A-2
Q2551	A-2
Q2552	B-2
Q2553	C-1
Q2554	B-1
Q2555	B-1

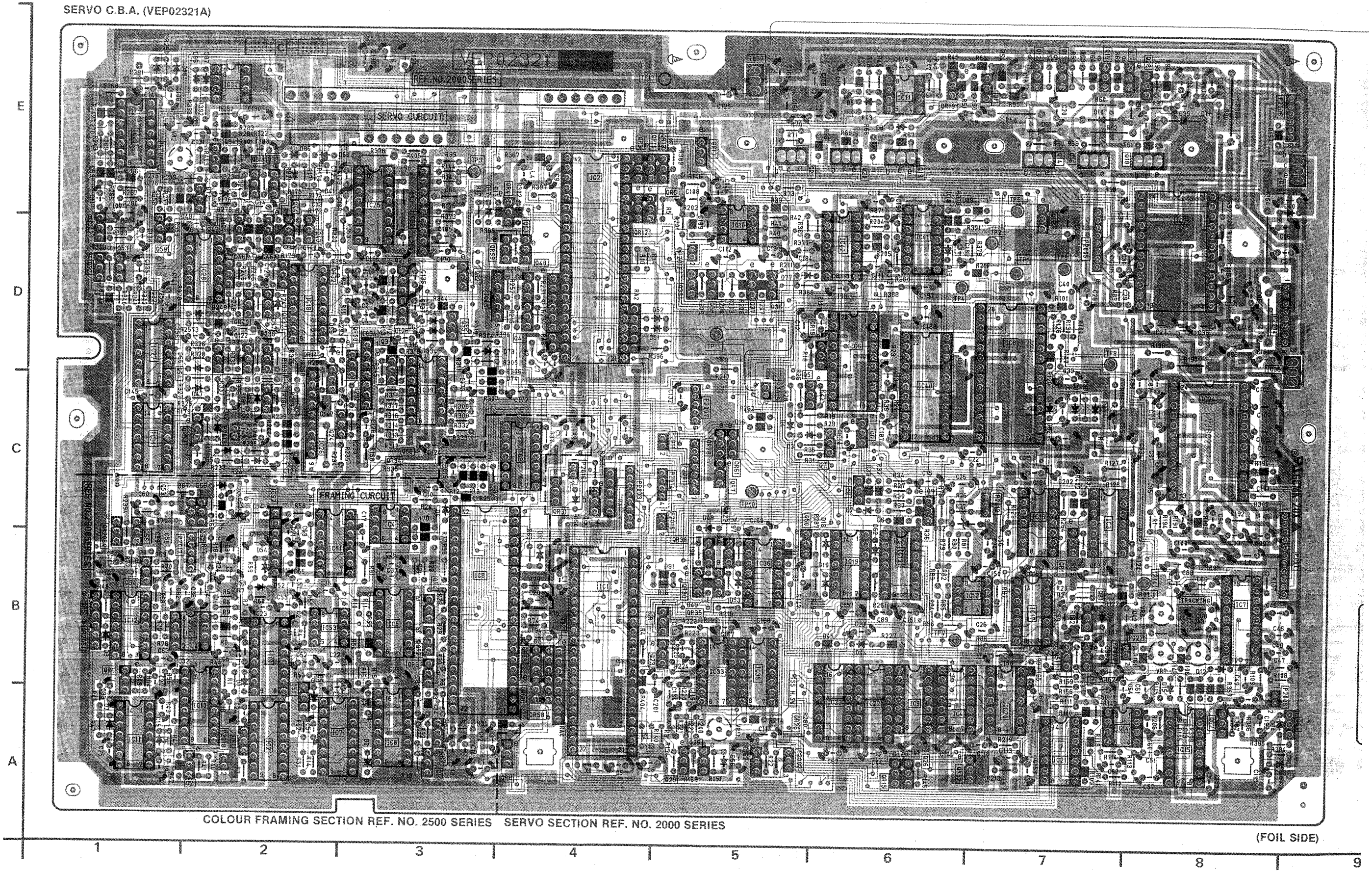
Transistor & Resistor	
QR2501	A-2
QR2502	B-3
QR2503	B-3
QR2504	B-3
QR2505	B-1
QR2506	B-1
QR2507	A-3

Integrated Circuit	
IC2501	B-2
IC2502	A-2
IC2503	B-1
IC2504	B-3
IC2505	B-5
IC2506	A-3
IC2507	A-3
IC2508	B-3
IC2509	C-4
IC2510	A-2
IC2511	A-1
IC2512	B-1
IC2551	B-2
IC2552	C-2
IC2553	B-2

Connector	
P2017	B-1
P2018	A-2

ADDRESS INFORMATION

SERVO C.B.A. (VEP02321A)


SERVO C.B.A. (VEP02321A)
VEP02321
REF. NO. 2000 SERIES
SERVO CIRCUIT
FRAMING CIRCUIT
TRACKING
E
D
C
B
A
1
2
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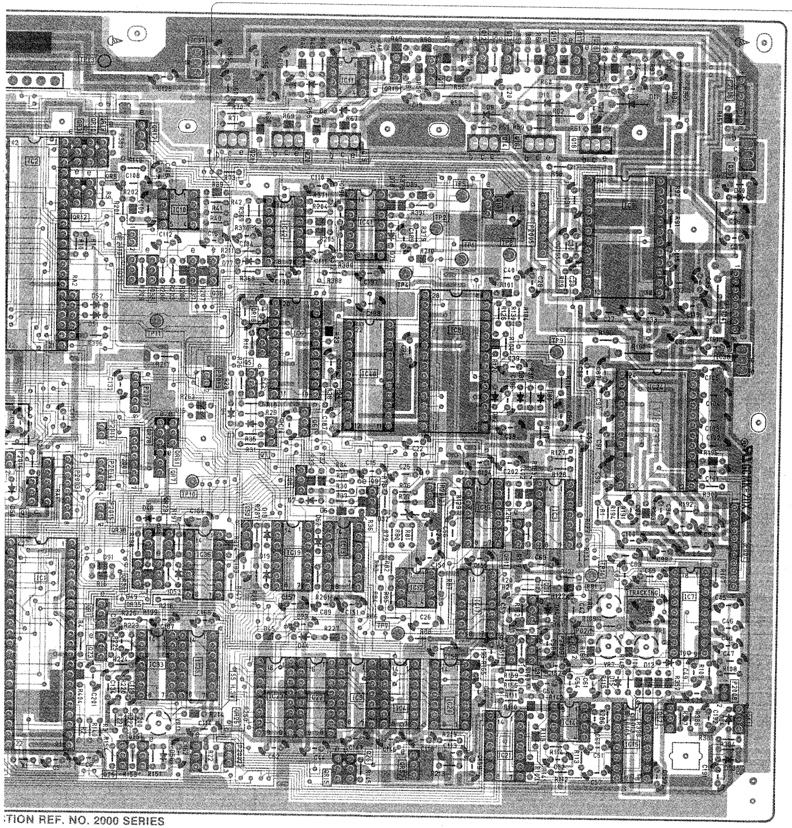
9

COLOUR FRAMING SECTION REF. NO. 2500 SERIES   SERVO SECTION REF. NO. 2000 SERIES

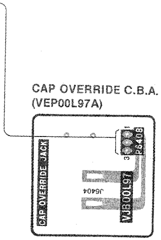
(FOIL SIDE)



TION REF. NO. 2000 SERIES

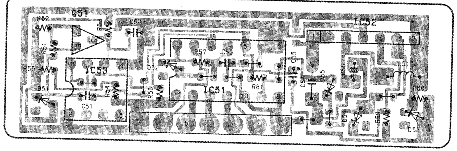
(FOIL SIDE)

CAP OVERRIDE C.B.A.
(VEP00L97A)

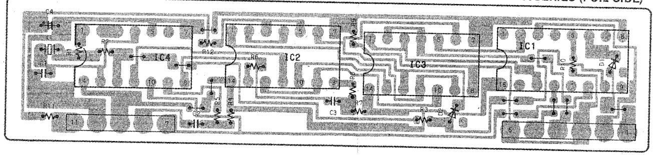

CAP OVERRIDE JACK
J6404
VJB00197
P6408

(FOIL SIDE)

FRAMING PACK (2) C.B.A. (VEP00G61A) REF. NO. 200SERIES (FOIL SIDE)

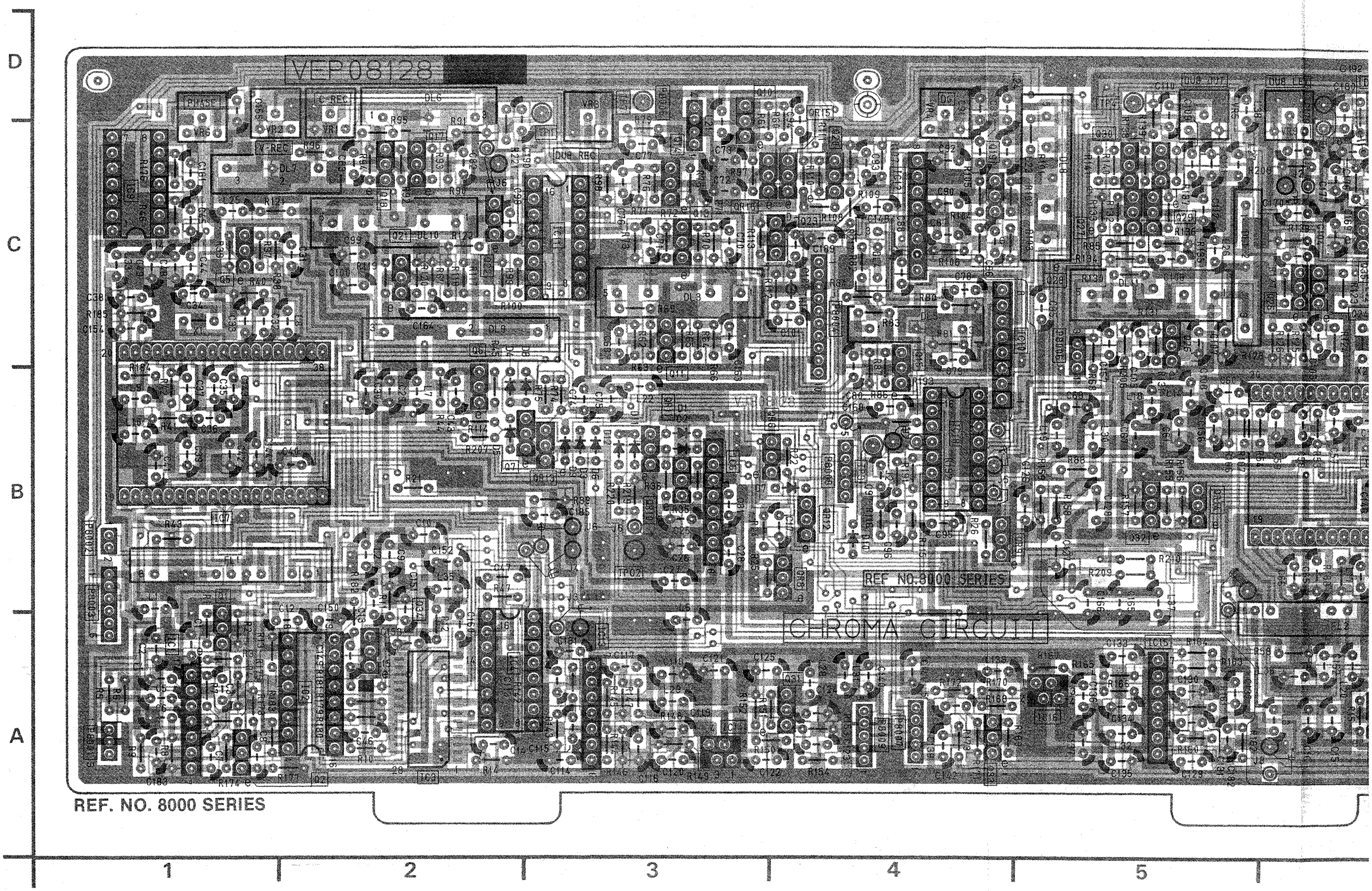

Q51
IC52
IC53
IC51

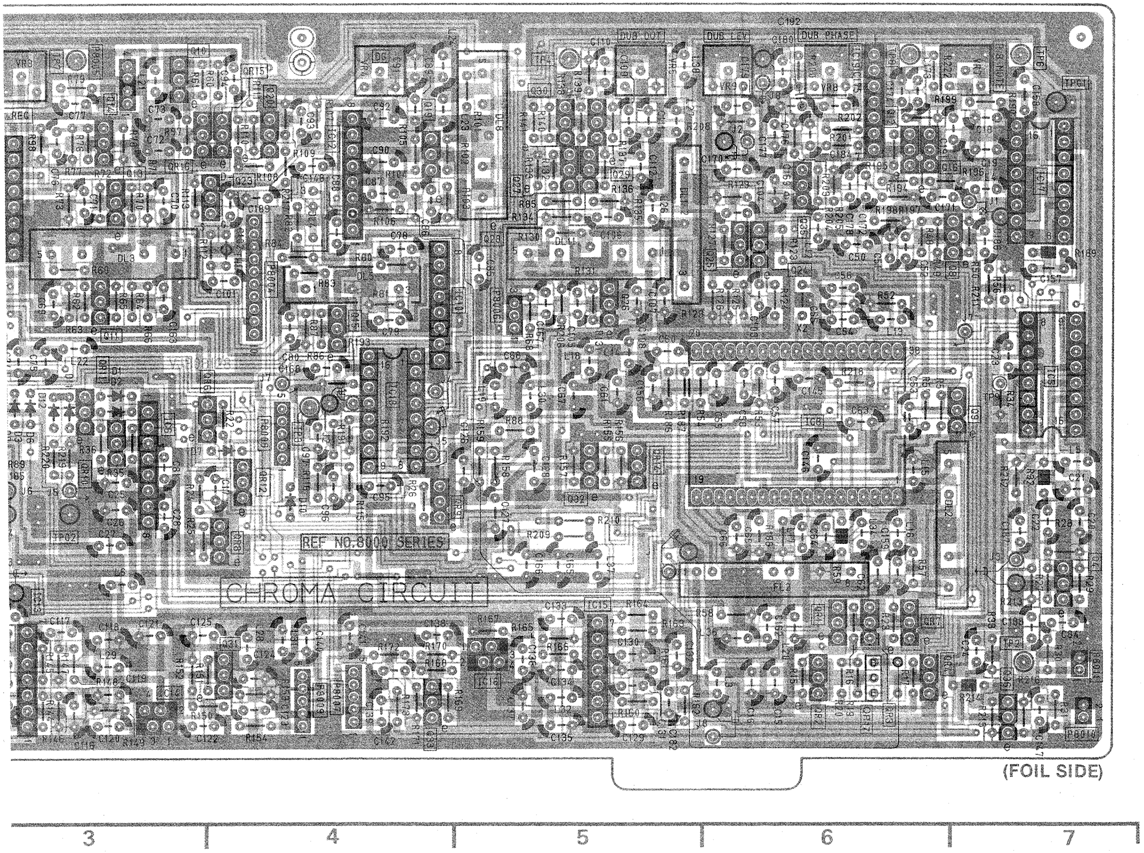
FRAMING PACK (1) C.B.A. (VEP00G60A) REF. NO. 200SERIES (FOIL SIDE)


IC4
IC2
IC3
IC1

4 5 6 7 8 9 10 11 12 13

CHROMINANCE C.B.A. (VEP08128A)


D
C
B
A
VEP08128
CHROMA CIRCUIT
REF. NO. 8000 SERIES
REF. NO. 8000 SERIES
1
2
3
4
5



Chrominance C.B.A.

Transistor	
Q8001	A-1
Q8002	A-1
Q8004	A-7
Q8005	C-1
Q8006	B-2
Q8007	B-3
Q8008	C-7
Q8009	B-7
Q8010	C-3
Q8011	C-3
Q8012	C-6
Q8013	C-3
Q8014	C-3
Q8015	C-4
Q8016	C-6
Q8017	C-2
Q8018	C-2
Q8019	C-4
Q8020	C-4
Q8021	C-2
Q8022	C-2
Q8023	C-4
Q8024	C-6
Q8025	C-6
Q8026	C-5
Q8027	C-5
Q8028	C-5
Q8029	C-5
Q8030	C-5
Q8031	A-4
Q8032	B-5
Q8033	A-4
Q8034	A-2
Q8035	C-6
Q8036	A-7

Transistor & Resistor	
QR8001	A-6
QR8002	A-6
QR8003	A-6
QR8004	A-6
QR8006	B-4
QR8007	A-6
QR8008	B-4
QR8009	B-4
QR8010	B-3
QR8011	B-3
QR8012	B-4
QR8013	B-3
QR8014	B-5
QR8015	C-4
QR8016	C-4
QR8017	A-6

Integrated Circuit	
IC8001	A-1
IC8002	A-2
IC8003	A-2
IC8004	A-2
IC8005	B-7
IC8006	B-3
IC8007	B-1
IC8008	B-6
IC8009	C-1
IC8010	C-4
IC8011	C-3
IC8012	C-4
IC8013	A-3
IC8014	A-3
IC8015	A-5
IC8016	A-5
IC8017	C-7
IC8018	B-4
IC8019	C-6

Test Point	
TP8001	D-3
TP8002	A-7
TP8003	B-4
TP8004	D-5
TP8005	D-7
TP8006	D-3
TP8008	D-6
TP8009	B-7
TPG8001	C-7
TPG8002	B-3

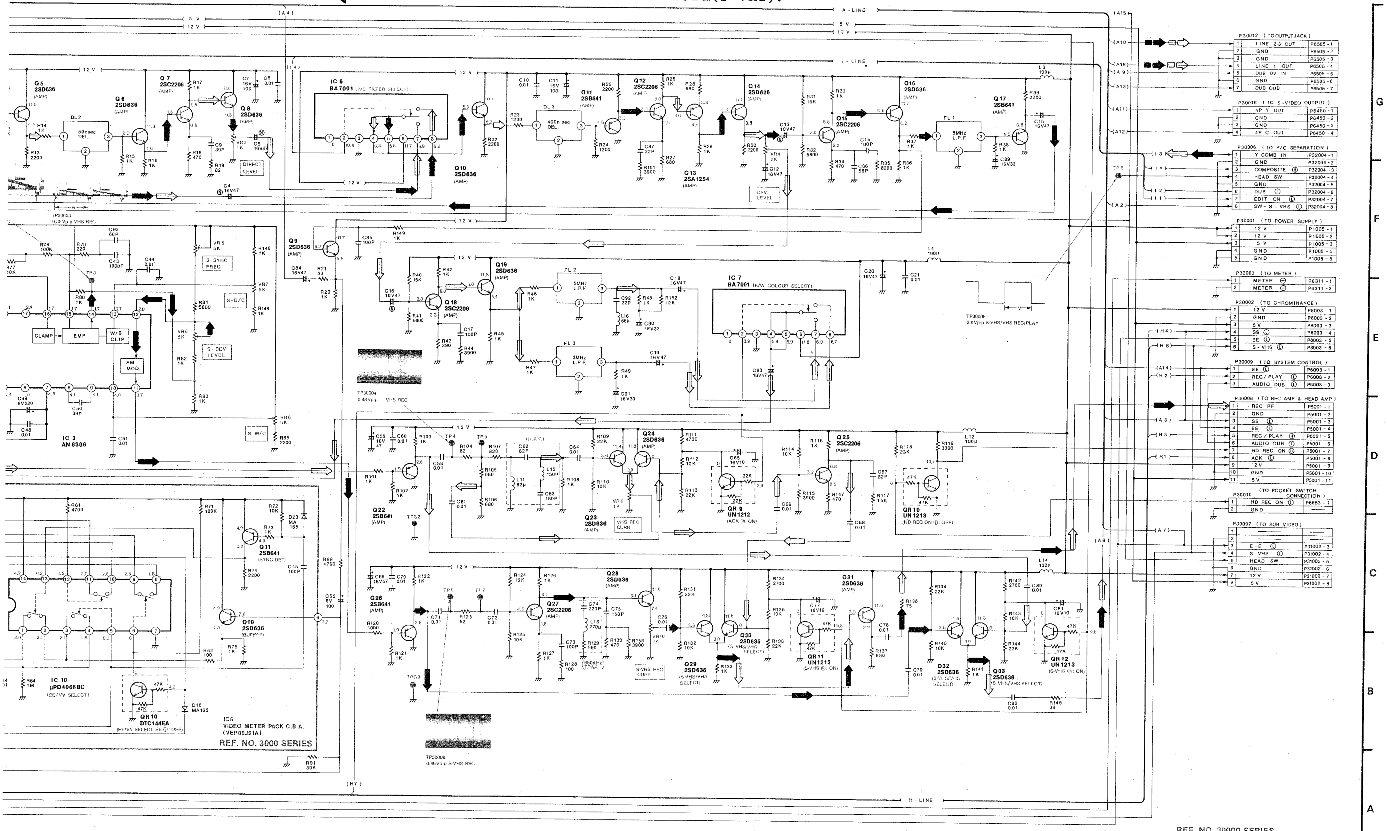
Adjustment	
VR8001	D-2
VR8002	D-1
VR8003	C-3
VR8004	D-4
VR8005	D-5
VR8006	D-1
VR8007	D-7
VR8008	D-6
VR8009	D-6

Connector	
P8001	A-1
P8002	B-1
P8003	B-1
P8004	C-4
P8005	C-3
P8006	C-5
P8007	A-4
P8008	B-4
P8009	A-4
P8010	A-7
P8011	A-7

ADDRESS INFORMATION

PATH IN PLAYBACK MODE(VHS).

MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


A - LINE
5 V
12 V
I - LINE
H - LINE
Q 5 2SD636 (AMP)
Q 6 2SD636 (AMP)
Q 7 2SC2206 (AMP)
Q 8 2SD636 (AMP)
DL 2 50nsec DEL.
DIRECT LEVEL
IC 6 BA7001 (Y/C FILTER SELECT)
Q10 2SD636 (AMP)
DL 3 400n sec DEL.
Q11 2SB641 (AMP)
Q12 2SC2206 (AMP)
Q13 2SA1254 (AMP)
Q14 2SD636 (AMP)
DEV LEVEL
Q15 2SC2206 (AMP)
Q16 2SD636 (AMP)
FL 1 5MHz L.P.F.
Q17 2SB641 (AMP)
TP30003 0.38Vp-p VHS REC
S-SYNC FREQ
S-D/C
S DEV LEVEL
CLAMP
EMP
W/B CLIP
FM MOD.
S W/C
IC 3 AN 6306
Q9 2SD636 (AMP)
Q19 2SD636 (AMP)
Q 18 2SC2206 (AMP)
FL 2 5MHz L.P.F.
FL 3 3MHz L.P.F.
IC 7 BA7001 (B/W COLOUR SELECT)
TP30008 2.6Vp-p S-VHS/VHS REC/PLAY
TP3000a 0.46Vp-p VHS REC
(H.P.F.)
Q22 2SB641 (AMP)
Q23 2SD636 (AMP)
Q24 2SD636 (AMP)
VHS REC CURR.
QR 9 UN 1212 (ACK Ⓗ: ON)
Q 25 2SC2206 (AMP)
QR 10 UN 1213 (HD REC ON Ⓛ: OFF)
Q11 2SB641 (SYNC DET)
Q10 2SD636 (BUFFER)
IC 10 μPD4066BC (EE/VV SELECT)
QR 10 DTC144EA (EE/VV SELECT EE Ⓛ: OFF)
IC5 VIDEO METER PACK C.B.A. (VEP00J21A)
REF. NO. 3000 SERIES
Q26 2SB641 (AMP)
Q27 2SC2206 (AMP)
Q28 2SD636 (AMP)
(650KHz) TRAP
S-VHS REC CURR.
Q29 2SD636 (S-VHS/VHS SELECT)
Q30 2SD636 (S-VHS/VHS SELECT)
QR11 UN1213 (S-VHS Ⓛ: ON)
Q31 2SD636 (AMP)
Q32 2SD636 (S-VHS/VHS SELECT)
Q33 2SD636 (S-VHS/VHS SELECT)
QR 12 UN1213 (S-VHS Ⓛ: ON)
TP30006 0.46Vp-p S-VHS REC
P30012 (TO OUTPUT JACK)
1 LINE 2-3 OUT P6505 - 1
2 GND P6505 - 2
3 GND P6505 - 3
4 LINE 1 OUT P6505 - 4
5 DUB 0V IN P6505 - 5
6 GND P6505 - 6
7 DUB OUB P6505 - 7
P30016 (TO S-VIDEO OUTPUT)
1 4P Y OUT P6450 - 1
2 GND P6450 - 2
3 GND P6450 - 3
4 4P C OUT P6450 - 4
P30006 (TO Y/C SEPARATION)
1 Y COMB IN P32004 - 1
2 GND P32004 - 2
3 COMPOSITE Ⓗ P32004 - 3
4 HEAD SW P32004 - 4
5 GND P32004 - 5
6 DUB Ⓛ P32004 - 6
7 EDIT ON Ⓛ P32004 - 7
8 SW - S - VHS Ⓛ P32004 - 8
P30001 (TO POWER SUPPLY)
1 12 V P1005 - 1
2 12 V P1005 - 2
3 5 V P1005 - 3
4 GND P1005 - 4
5 GND P1005 - 5
P30003 (TO METER)
1 METER ⊕ P6311 - 1
2 METER ⊖ P6311 - 2
P30002 (TO CHROMINANCE)
1 12 V P8003 - 1
2 GND P8003 - 2
3 5 V P8003 - 3
4 SS Ⓛ P8003 - 4
5 EE Ⓛ P8003 - 5
6 S - VHS Ⓛ P8003 - 6
P30009 (TO SYSTEM CONTROL)
1 EE Ⓛ P6008 - 1
2 REC / PLAY Ⓛ P6008 - 2
3 AUDIO DUB Ⓛ P6008 - 3
P30008 (TO REC AMP & HEAD AMP)
1 REC RF P5001 - 1
2 GND P5001 - 2
3 SS Ⓛ P5001 - 3
4 EE Ⓛ P5001 - 4
5 REC / PLAY Ⓗ P5001 - 5
6 AUDIO DUB Ⓛ P5001 - 6
7 HD REC ON Ⓗ P5001 - 7
8 ACK Ⓛ P5001 - 8
9 12 V P5001 - 9
10 GND P5001 - 10
11 5 V P5001 - 11
P30010 (TO POCKET SWITCH CONNECTION)
1 HD REC ON Ⓛ P6653 - 1
2 GND
P30007 (TO SUB VIDEO)
3 E - E Ⓛ P31002 - 3
4 S VHS Ⓛ P31002 - 4
5 HEAD SW P31002 - 5
6 GND P31002 - 6
7 12 V P31002 - 7
8 5 V P31002 - 8
G
F
E
D
C
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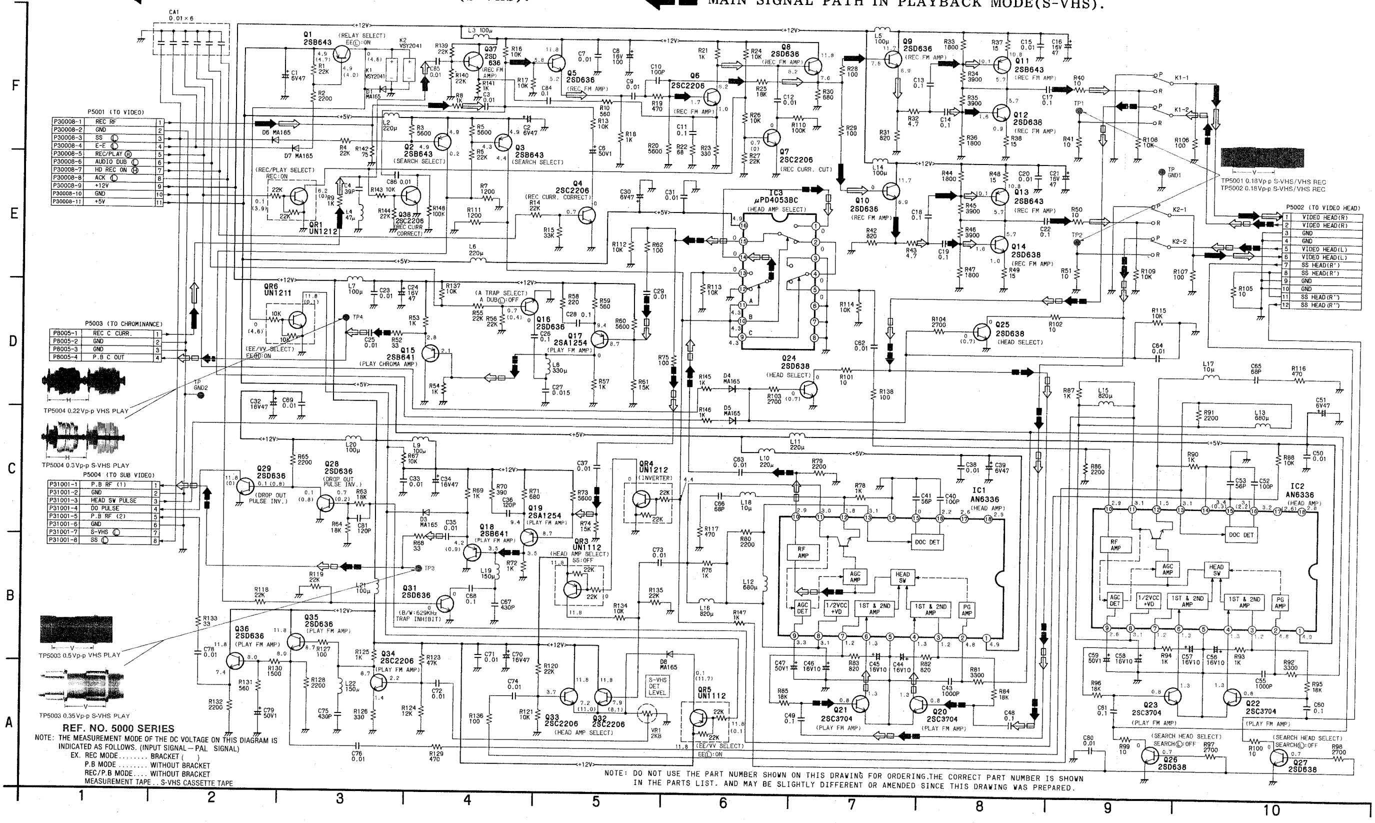
REF. NO. 30000 SERIES

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REC AMP & HEAD AMP SCHEMATIC DIAGRAM (VEP05129B) - VIDEO SECTION -

⇦ MAIN SIGNAL PATH IN REC MODE(VHS).
⬅ MAIN SIGNAL PATH IN REC MODE(S-VHS).
⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).
⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


P5001 (TO VIDEO)
P30008-1 REC RF 1
P30008-2 GND 2
P30008-3 SS Ⓛ 3
P30008-4 E-E Ⓛ 4
P30008-5 REC/PLAY Ⓗ 5
P30008-6 AUDIO DUB Ⓛ 6
P30008-7 HD REC ON Ⓗ 7
P30008-8 ACK Ⓛ 8
P30008-9 +12V 9
P30008-10 GND 10
P30008-11 +5V 11
P5003 (TO CHROMINANCE)
P8005-1 REC C CURR. 1
P8005-2 GND 2
P8005-3 GND 3
P8005-4 P.B C OUT 4
TP5004 0.22Vp-p VHS PLAY
TP5004 0.3Vp-p S-VHS PLAY
P5004 (TO SUB VIDEO)
P31001-1 P.B RF (1) 1
P31001-2 GND 2
P31001-3 HEAD SW PULSE 3
P31001-4 DO PULSE 4
P31001-5 P.B RF (2) 5
P31001-6 GND 6
P31001-7 S-VHS Ⓛ 7
P31001-8 SS Ⓛ 8
TP5003 0.5Vp-p VHS PLAY
TP5003 0.35Vp-p S-VHS PLAY
P5002 (TO VIDEO HEAD)
1 VIDEO HEAD(R)
2 VIDEO HEAD(R)
3 GND
4 GND
5 VIDEO HEAD(L)
6 VIDEO HEAD(L)
7 SS HEAD(R')
8 SS HEAD(R')
9 GND
10 GND
11 SS HEAD(R'')
12 SS HEAD(R'')
TP5001 0.18Vp-p S-VHS/VHS REC
TP5002 0.18Vp-p S-VHS/VHS REC
CA1 0.01×6
Q1 2SB643 (RELAY SELECT) EEⓁ:ON
K1 VSY2041
K2 VSY2041
Q37 2SD636 (REC FM AMP)
Q5 2SD636 (REC FM AMP)
Q6 2SC2206 (REC FM AMP)
Q8 2SD636 (REC FM AMP)
Q7 2SC2206 (REC CURR. CUT)
Q9 2SD636 (REC FM AMP)
Q11 2SB643 (REC FM AMP)
Q12 2SD638 (REC FM AMP)
Q10 2SD636 (REC FM AMP)
Q13 2SB643 (REC FM AMP)
Q14 2SD638 (REC FM AMP)
K1-1
K1-2
K2-1
K2-2
TP1
TP2
TP GND1
Q2 2SB643 (SEARCH SELECT)
Q3 2SB643 (SEARCH SELECT)
QR1 UN1212 (REC/PLAY SELECT) REC:ON
Q38 2SC2206 (REC CURR CORRECT)
Q4 2SC2206 (REC CURR. CORRECT)
IC3 μPD4053BC (HEAD AMP SELECT)
QR6 UN1211 (EE/VV SELECT) EEⓁ:ON
TP4
Q15 2SB641 (PLAY CHROMA AMP)
Q16 2SD636 (A TRAP SELECT) A DUBⓁ:OFF
Q17 2SA1254 (PLAY FM AMP)
Q24 2SD638 (HEAD SELECT)
Q25 2SD638 (HEAD SELECT)
TP GND2
Q29 2SD636 (DROP OUT PULSE INV.)
Q28 2SD636 (DROP OUT PULSE INV.)
Q18 2SB641 (PLAY FM AMP)
Q19 2SA1254 (PLAY FM AMP)
QR4 UN1212 (INVERTER)
QR3 UN1112 (HEAD AMP SELECT) SS:OFF
TP3
Q31 2SD636 (B/W:629KHz TRAP INHIBIT)
IC1 AN6336 (HEAD AMP)
IC2 AN6336 (HEAD AMP)
RF AMP
DOC DET
AGC AMP
HEAD SW
AGC DET
1/2VCC +VD
1ST & 2ND AMP
PG AMP
Q36 2SD636 (PLAY FM AMP)
Q35 2SD636 (PLAY FM AMP)
Q34 2SC2206 (PLAY FM AMP)
Q33 2SC2206 (HEAD AMP SELECT)
Q32 2SC2206
S-VHS DET LEVEL
VR1 2KB
QR5 UN1112 (EE/VV SELECT) EEⓁ:ON
Q21 2SC3704 (PLAY FM AMP)
Q20 2SC3704 (PLAY FM AMP)
Q23 2SC3704 (PLAY FM AMP)
Q22 2SC3704 (PLAY FM AMP)
Q26 2SD638 (SEARCH HEAD SELECT) SEARCHⓁ:OFF
Q27 2SD638 (SEARCH HEAD SELECT) SEARCHⓁ:OFF
+12V
+5V
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10

REF. NO. 5000 SERIES

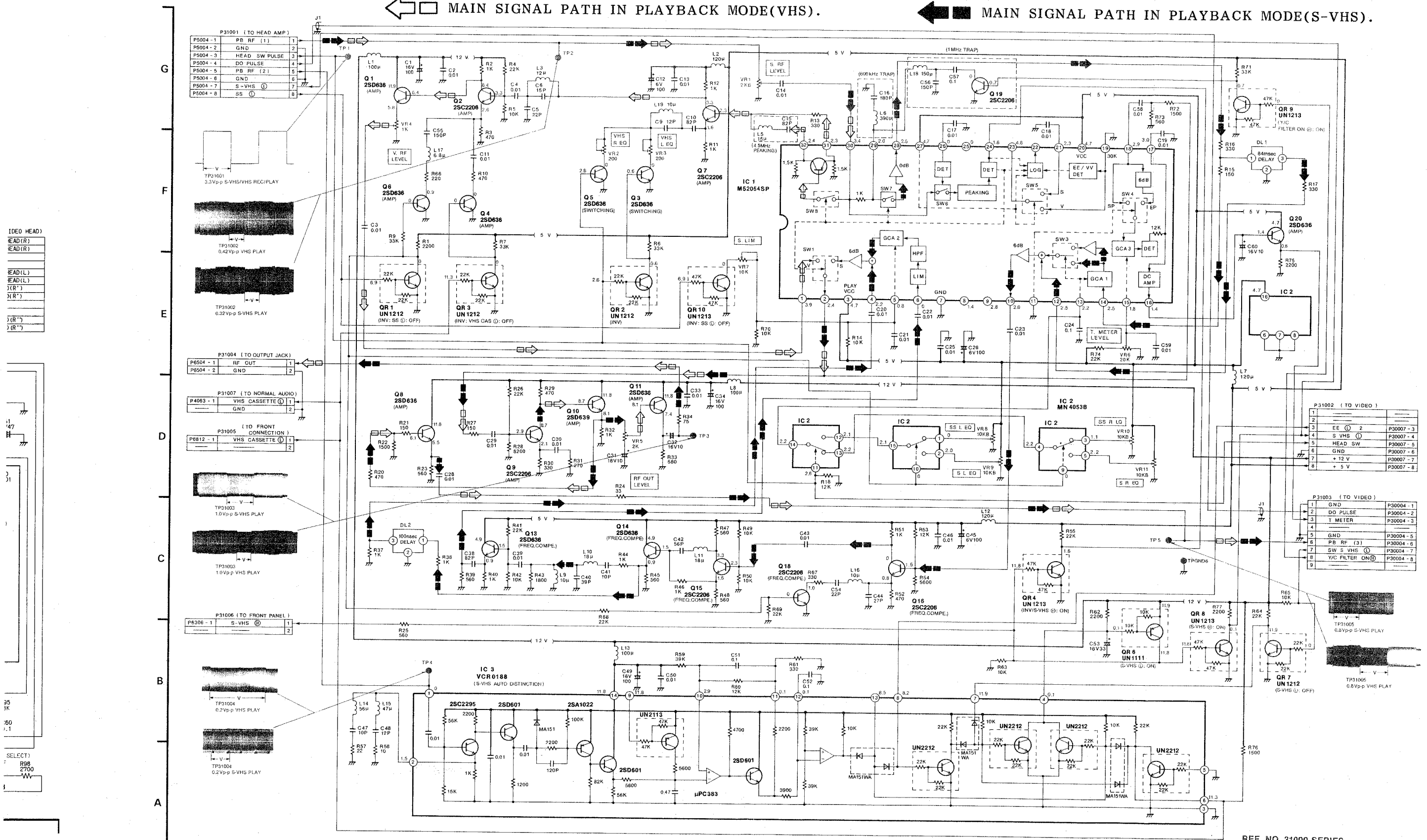
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS INDICATED AS FOLLOWS. (INPUT SIGNAL—PAL SIGNAL)
EX. REC MODE........ BRACKET ( )
P.B MODE........ WITHOUT BRACKET
REC/P.B MODE.... WITHOUT BRACKET
MEASUREMENT TAPE.. S-VHS CASSETTE TAPE

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

SUB VIDEO SCHEMATIC DIAGRAM

⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).

⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).

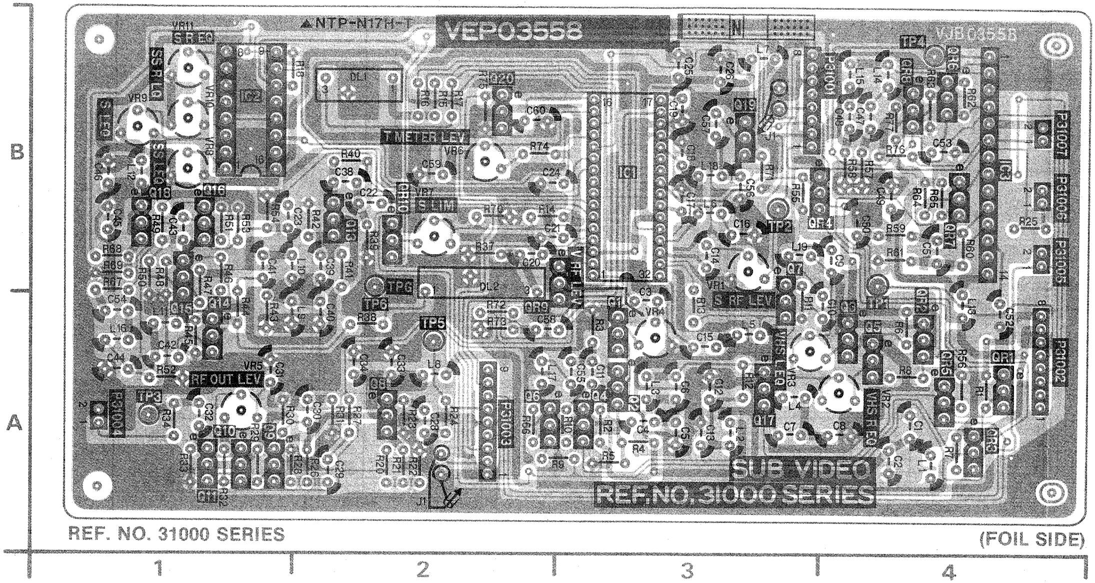

P31001 (TO HEAD AMP)
P5004-1 PB RF (1)
P5004-2 GND
P5004-3 HEAD SW PULSE
P5004-4 DO PULSE
P5004-5 PB RF (2)
P5004-6 GND
P5004-7 S-VHS Ⓛ
P5004-8 SS Ⓛ
TP31001 3.3Vp-p S-VHS/VHS REC/PLAY
TP31002 0.42Vp-p VHS PLAY
TP31002 0.32Vp-p S-VHS PLAY
P31004 (TO OUTPUT JACK)
P6504-1 RF OUT
P6504-2 GND
P31007 (TO NORMAL AUDIO)
P4063-1 VHS CASSETTE Ⓛ
GND
P31005 (TO FRONT CONNECTION)
P6812-1 VHS CASSETTE Ⓛ
TP31003 1.0Vp-p S-VHS PLAY
TP31003 1.0Vp-p VHS PLAY
P31006 (TO FRONT PANEL)
P6306-1 S-VHS Ⓗ
TP31004 0.2Vp-p VHS PLAY
TP31004 0.2Vp-p S-VHS PLAY
Q1 2SD636 (AMP)
Q2 2SC2206 (AMP)
Q6 2SD636 (AMP)
Q4 2SD636 (AMP)
Q5 2SD636 (SWITCHING)
Q3 2SD636 (SWITCHING)
Q7 2SC2206 (AMP)
QR1 UN1212 (INV: SS Ⓛ: OFF)
QR3 UN1212 (INV: VHS CAS Ⓛ: OFF)
QR2 UN1212 (INV)
QR10 UN1213 (INV: SS Ⓛ: OFF)
IC1 M52054SP
V. RF LEVEL
VHS R EQ
VHS L EQ
S. RF LEVEL
S. LIM
(600kHz TRAP)
(1MHz TRAP)
Q19 2SC2206
(4.5MHz PEAKING)
DET
LOG
EE/VV DET
PEAKING
SW5
SW6
SW7
SW8
SW1
SW3
SW4
GCA 1
GCA 2
GCA 3
HPF
LIM
DC AMP
PLAY VCC
GND
VCC
T. METER LEVEL
QR9 UN1213 (Y/C FILTER ON Ⓗ: ON)
DL1 64msec DELAY
Q20 2SD636 (AMP)
IC2
Q8 2SD636 (AMP)
Q10 2SD639 (AMP)
Q11 2SD636 (AMP)
Q9 2SC2206 (AMP)
RF OUT LEVEL
TP3
IC2 MN4053B
SS L EE
SS R LG
S L EQ
S R EQ
P31002 (TO VIDEO)
EE Ⓛ 2
S VHS Ⓛ
HEAD SW
GND
+12 V
+5 V
P30007-3
P30007-4
P30007-5
P30007-6
P30007-7
P30007-8
P31003 (TO VIDEO)
GND
DO PULSE
T METER
GND
PB RF (3)
SW S VHS Ⓛ
Y/C FILTER ON Ⓗ
P30004-1
P30004-2
P30004-3
P30004-5
P30004-6
P30004-7
P30004-8
DL2 100nsec DELAY
Q13 2SD636 (FREQ.COMPE.)
Q14 2SD636 (FREQ.COMPE)
Q15 2SC2206 (FREQ.COMPE.)
Q18 2SC2206 (FREQ.COMPE)
Q16 2SC2206 (FREQ.COMPE.)
QR4 UN1213 (INV/S-VHS Ⓗ: ON)
TP5
TPGND6
QR8 UN1213 (S-VHS Ⓗ: ON)
QR6 UN1111 (S-VHS Ⓛ: ON)
QR7 UN1212 (S-VHS Ⓛ: OFF)
TP31005 0.8Vp-p S-VHS PLAY
TP31005 0.8Vp-p VHS PLAY
IC3 VCR0188 (S-VHS AUTO DISTINCTION)
TP4
2SC2295
2SD601
2SA1022
MA151
UN2113
µPC383
MA151WA
UN2212
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF. NO. 31000 SERIES

SUB VIDEO C.B.A. (VEP03558A)



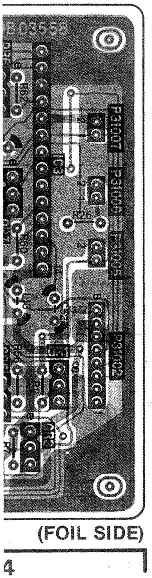
Sub Video C.B.A.	
Transistor	
Q31001	A-3
Q31002	A-3
Q31003	A-4
Q31004	A-3
Q31005	A-4
Q31006	A-3
Q31007	B-3
Q31008	A-2
Q31009	A-2
Q31010	A-1
Q31011	A-1
Q31013	B-2
Q31014	A-1
Q31015	B-1
Q31016	B-1
Q31018	B-1
Q31019	B-3
Q31020	B-2
Transistor & Resistor	
QR31001	A-4
QR31002	A-4
QR31003	A-4
QR31004	B-4
QR31006	B-4
QR31007	B-4
QR31008	B-4
QR31009	B-3
QR31010	B-2
Integrated Circuit	
IC31001	B-3
IC31002	B-2
IC31003	B-4
Test Point	
TP31001	B-4
TP31002	B-3
TP31003	A-3
TP31004	B-4
TP31005	A-2
TP31006 (GND)	B-2
Adjustment	
VR31001	B-3
VR31002	A-4
VR31003	A-4
VR31004	A-3
VR31005	A-1
VR31006	B-2
VR31007	B-2
VR31008	B-1
VR31009	B-1
VR31010	B-1
VR31011	B-1
Connector	
P31001	B-4
P31002	A-4
P31003	A-2
P31004	A-1
P31005	B-4
P31006	B-4
P31007	B-4

ADDRESS INFORMATION

VIDEO C.B.A. (VEP03557A)

Video, Video Sub & S-Video Output C.B.A.	
Transistor	
Q3010	D-10
Q3011	D-10
Q30001	D-8
Q30002	D-7
Q30003	D-7
Q30004	D-7
Q30005	D-8
Q30006	D-8
Q30007	D-8
Q30008	D-8
Q30009	D-7
Q30010	D-7
Q30011	D-8
Q30012	D-8
Q30013	D-8
Q30014	C-8
Q30015	C-9
Q30016	C-9
Q30017	B-9
Q30018	C-8
Q30019	C-8
Q30020	C-8
Q30021	A-8
Q30022	B-7
Q30023	C-7
Q30024	C-7
Q30025	B-6
Q30026	B-7
Q30027	B-6
Q30028	B-6
Q30029	C-6
Q30030	B-6
Q30031	A-6
Q30032	B-7
Q30033	B-6
Q30034	C-8
Q30051	C-6
Q30052	C-6
Q30053	C-5
Q30054	B-5
Q30055	B-5
Q30056	C-5
Q30057	B-5
Q30061	A-5
Q30062	B-5
Q30063	C-3
Q30064	C-3
Q30065	D-3
Q30066	D-4
Q30067	A-2
Q30068	B-2
Q30069	A-3
Q30070	B-3
Q30071	A-4
Q30072	A-3
Q30073	A-2
Q30074	A-2
Q30075	A-1
Q30076	A-2
Q30077	C-2
Q30078	C-2
Q30079	A-2
Q30081	C-2
Q30082	C-2
Q30086	B-2
Q30087	B-3
Q30088	C-3
Q30089	B-3
Q30090	B-3
Q30091	D-3
Q30092	B-5
Q30093	D-1
Q30094	B-5
Q30095	C-4
Q30096	B-2
Q30099	A-3
Q30100	B-10
Q30101	C-10
Q30102	B-10
Q30103	B-10
Transistor & Resistor	
QR3009	D-11
QR3010	D-10
QR3012	D-11
QR30001	C-7
QR30002	B-7
QR30003	A-7
QR30004	A-7
QR30005	A-6
QR30006	A-7
QR30007	A-7
QR30008	A-7
QR30009	B-7
QR30010	C-6
QR30011	B-6
QR30012	B-6
QR30013	B-7
QR30051	C-6
QR30052	B-5
QR30053	C-5
QR30055	C-5
QR30056	C-5
QR30057	C-5
QR30058	B-4
QR30059	B-4
QR30060	B-2
QR30062	C-3
QR30063	D-5
Integrated Circuit	
IC3009	D-10
IC3010	D-10
IC30001	C-7
IC30002	B-9
IC30003	A-8
IC30004	A-7
IC30005	D-5
IC30006	D-7
IC30007	C-7
IC30051	D-6
IC30052	C-6
IC30053	A-5
IC30054	A-4
IC30055	C-5
IC30056	C-4
IC30057	B-4
IC30058	C-3
IC30059	C-4
IC30060	D-2
IC30061	D-1
IC30062	C-1
IC30063	B-2
IC30064	B-2
IC30065	C-3
Test Point	
TP30001	C-8
TP30002	B-8
TP30003	B-8
TP30004	B-7
TP30005	B-7
TP30006	A-6
TP30007	B-6
TP30008	
TP30009	
TP30010	
TP30011	
TP30012	
TP30013	
TP30014	
TP30015	
TP30016	
TP30017	
TP30020	
TP30021	
TP30022	
TP30023	
TP30024	
TP30025	
TPG30001	
TPG30002	
TPG30003	
TPG30004	
TPG30005	
Adjustment	
VR30001	
VR30002	
VR30003	
VR30004	
VR30005	
VR30006	
VR30007	
VR30008	
VR30009	
VR30010	
VR30011	
VR30012	
VR30051	
VR30052	
VR30053	
VR30055	
VR30056	
VR30057	
VR30058	
VR30059	
VR30060	
VR30061	
VR30062	
VR30063	
VR30064	
VR30067	
VR30068	
Connector	
P6450	
P30001	
P30002	
P30003	
P30004	
P30005	
P30006	
P30007	
P30008	
P30009	
P30010	
P30011	
P30012	
P30013	
P30014	
P30015	
P30016	
P30017	

ADDRESS INFORMATION



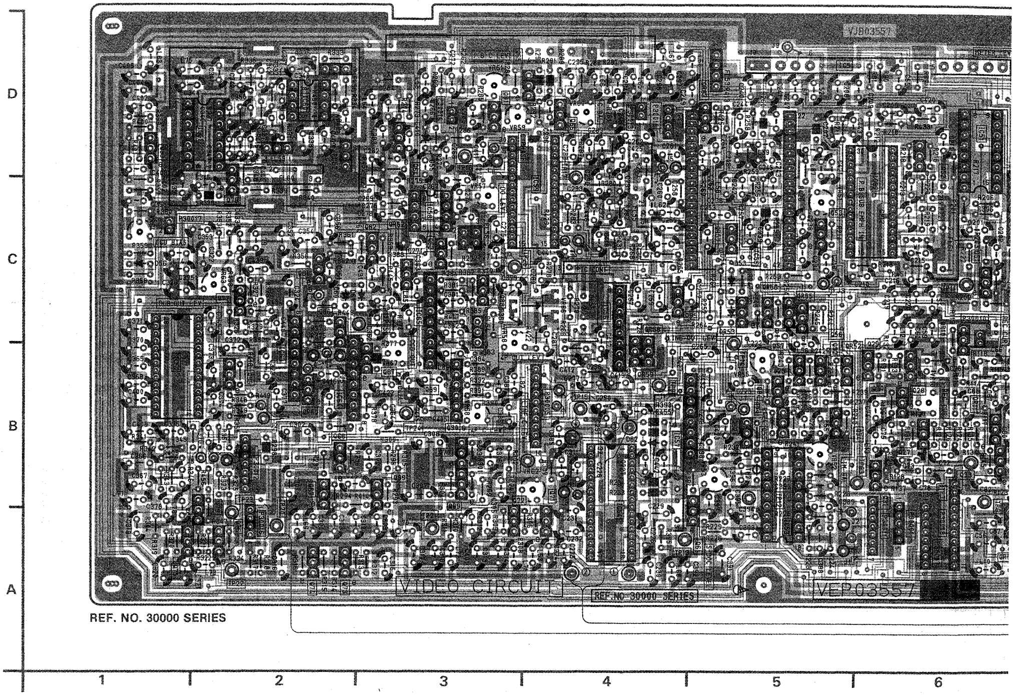
(FOIL SIDE)

VIDEO C.B.A. (VEP03557A)

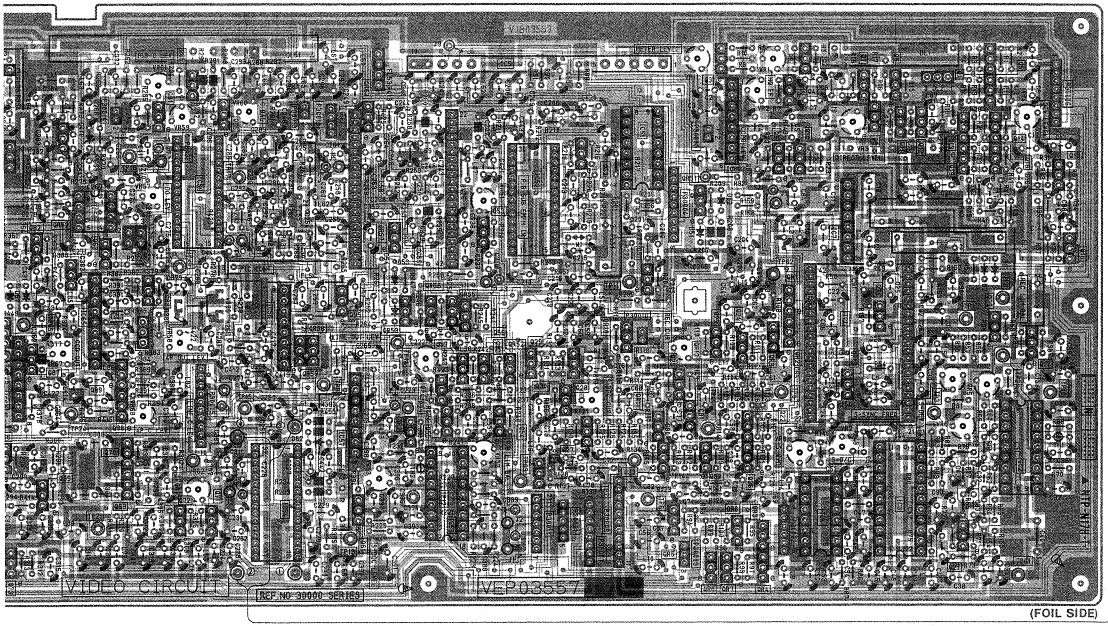
Video, Video Sub & S-Video Output C.B.A.	
Transistor	
Q3010	D-10
Q3011	D-10
Q30001	D-8
Q30002	D-7
Q30003	D-7
Q30004	D-7
Q30005	D-8
Q30006	D-8
Q30007	D-8
Q30008	D-8
Q30009	D-7
Q30010	D-7
Q30011	D-8
Q30012	D-8
Q30013	D-8
Q30014	C-8
Q30015	C-9
Q30016	C-9
Q30017	B-9
Q30018	C-8
Q30019	C-8
Q30020	C-8
Q30021	A-8
Q30022	B-7
Q30023	C-7
Q30024	C-7
Q30025	B-6
Q30026	B-7
Q30027	B-6
Q30028	B-6
Q30029	C-6
Q30030	B-6
Q30031	A-6
Q30032	B-7
Q30033	B-6
Q30034	C-8
Q30051	C-6
Q30052	C-6
Q30053	C-5
Q30054	B-5
Q30055	B-5
Q30056	C-5
Q30057	B-5
Q30061	A-5
Q30062	B-5
Q30063	C-3
Q30064	C-3
Q30065	D-3
Q30066	D-4
Q30067	A-2
Q30068	B-2
Q30069	A-3
Q30070	B-3
Q30071	A-4
Q30072	A-3
Q30073	A-2
Q30074	A-2
Q30075	A-1
Q30076	A-2
Q30077	C-2
Q30078	C-2
Q30079	A-2
Q30081	C-2
Q30082	C-2
Q30086	B-2
Q30087	B-3
Q30088	C-3
Q30089	B-3
Q30090	B-3
Q30091	D-3
Q30092	B-5
Q30093	D-1
Q30094	B-5
Q30095	C-4
Q30096	B-2
Q30099	A-3
Q30100	B-10
Q30101	C-10
Q30102	B-10
Q30103	B-10
Transistor & Resistor	
QR3009	D-11
QR3010	D-10
QR3012	D-11
QR30001	C-7
QR30002	B-7
QR30003	A-7
QR30004	A-7
QR30005	A-6
QR30006	A-7
QR30007	A-7
QR30008	A-7
QR30009	B-7
QR30010	C-6
QR30011	B-6
QR30012	B-6
QR30013	B-7
QR30051	C-6
QR30052	B-5
QR30053	C-5
QR30055	C-5
QR30056	C-5
QR30057	C-5
QR30058	B-4
QR30059	B-4
QR30060	B-2
QR30062	C-3
QR30063	D-5
Integrated Circuit	
IC3009	D-10
IC3010	D-10
IC30001	C-7
IC30002	B-9
IC30003	A-8
IC30004	A-7
IC30005	D-5
IC30006	D-7
IC30007	C-7
IC30051	D-6
IC30052	C-6
IC30053	A-5
IC30054	A-4
IC30055	C-5
IC30056	C-4
IC30057	B-4
IC30058	C-3
IC30059	C-4
IC30060	D-2
IC30061	D-1
IC30062	C-1
IC30063	B-2
IC30064	B-2
IC30065	C-3
Test Point	
TP30001	C-8
TP30002	B-8
TP30003	B-8
TP30004	B-7
TP30005	B-7
TP30006	A-6
TP30007	B-6
TP30008	C-8
TP30009	B-4
TP30010	B-9
TP30011	C-6
TP30012	A-5
TP30013	A-4
TP30014	B-5
TP30015	B-4
TP30016	C-3
TP30017	C-4
TP30020	A-2
TP30021	A-3
TP30022	A-2
TP30023	A-2
TP30024	B-3
TP30025	C-3
TPG30001	A-9
TPG30002	C-7
TPG30003	B-5
TPG30004	A-3
TPG30005	B-3
Adjustment	
VR30001	D-7
VR30002	D-7
VR30003	D-8
VR30004	D-8
VR30005	B-8
VR30006	B-8
VR30007	B-7
VR30008	B-7
VR30009	B-6
VR30010	B-6
VR30011	D-7
VR30012	B-8
VR30051	C-5
VR30052	B-5
VR30053	B-5
VR30055	B-5
VR30056	C-4
VR30057	C-3
VR30058	B-3
VR30059	D-3
VR30060	D-4
VR30061	D-3
VR30062	B-4
VR30063	C-2
VR30064	C-1
VR30067	B-3
VR30068	B-3
Connector	
P6450	A-10
P30001	A-6
P30002	A-7
P30003	D-7
P30004	C-6
P30005	B-4
P30006	D-9
P30007	A-6
P30008	A-6
P30009	A-7
P30010	C-6
P30011	A-6
P30012	B-2
P30013	D-4
P30014	D-3
P30015	D-4
P30016	A-2
P30017	C-1

ADDRESS INFORMATION

VIDEO C.B.A. (VEP03557A)



REF. NO. 30000 SERIES


VJB03557
VIDEO CIRCUIT
REF.NO.30000 SERIES
VEP03557
3
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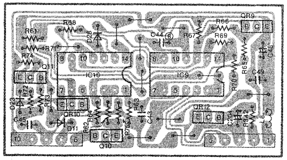
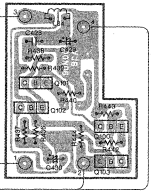
11

(FOIL SIDE)



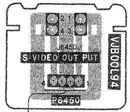
VIDEO METER PACK C.B.A. (VEP00J21A) (FOIL SIDE)
REF. NO. 3000 SERIES

VIDEO SUB C.B.A. (VEP00N06A)
REF. NO. 30000 SERIES



(FOIL SIDE)

S-VIDEO OUTPUT C.B.A.
(VEP00L94A)

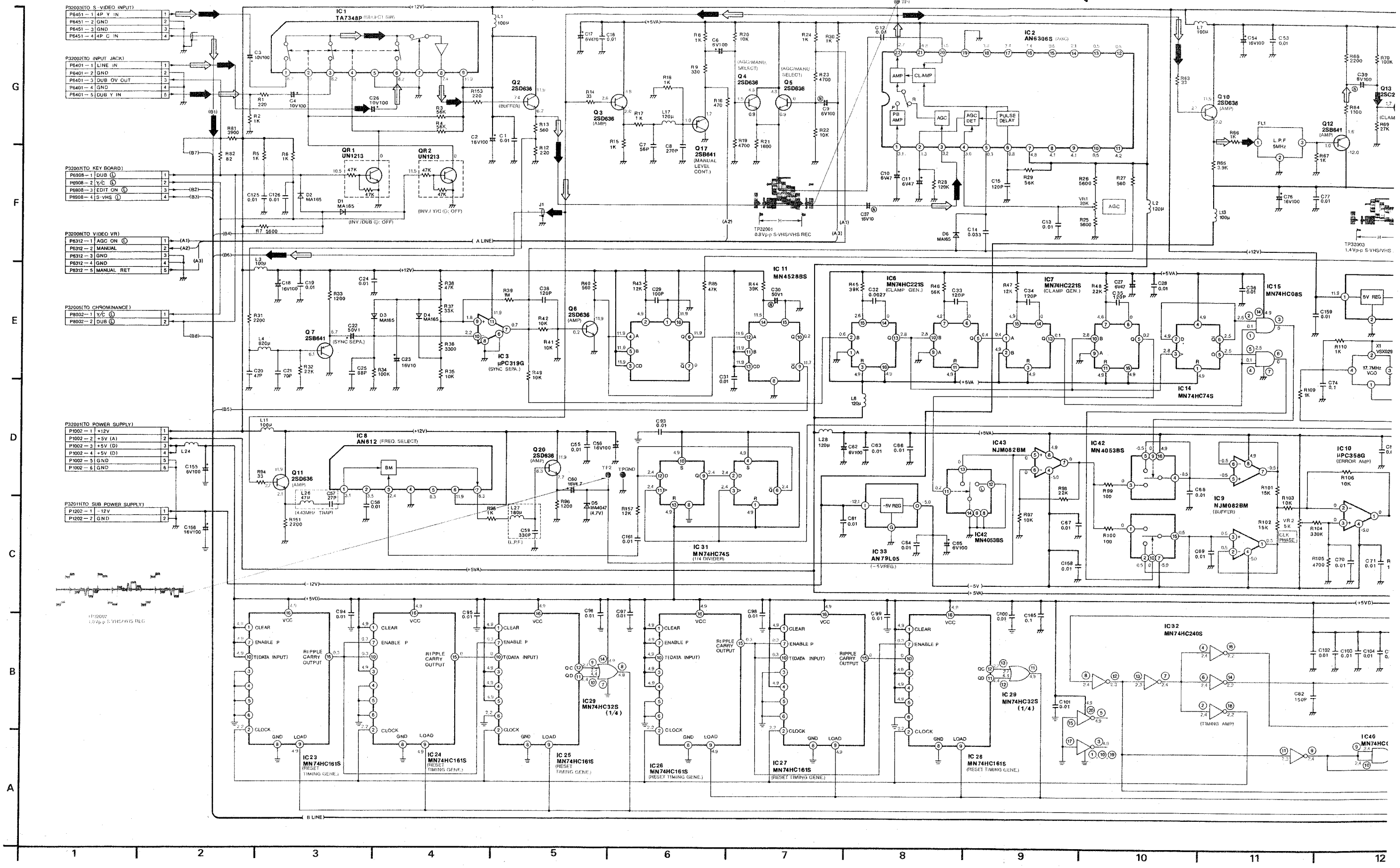

S VIDEO OUT PUT
J6450
P6450
VJB00L94

(FOIL SIDE)

Y/C SEPARATION SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE(VHS).

MAIN SIGNAL PATH IN REC MOD


P32003(TO S-VIDEO INPUT)
P6451-1 4P Y IN
P6451-2 GND
P6451-3 GND
P6451-4 4P C IN
P32002(TO INPUT JACK)
P6401-1 LINE IN
P6401-2 GND
P6401-3 DUB OV OUT
P6401-4 GND
P6401-5 DUB Y IN
P32007(TO KEY BOARD)
P6908-1 DUB
P6908-2 Y/C
P6908-3 EDIT ON
P6908-4 S-VHS
P32008(TO VIDEO VR)
P6312-1 AGC ON
P6312-2 MANUAL
P6312-3 GND
P6312-4 GND
P6312-5 MANUAL RET
P32005(TO CHROMINANCE)
P8002-1 Y/C
P8002-2 DUB
P32001(TO POWER SUPPLY)
P1002-1 +12V
P1002-2 +5V (A)
P1002-3 +5V (D)
P1002-4 +5V (D)
P1002-5 GND
P1002-6 GND
P32011(TO SUB POWER SUPPLY)
P1202-1 -12V
P1202-2 GND
IC1 TA7348P (SELECT SW)
Q2 2SD636 (BUFFER)
QR1 UN1213
QR2 UN1213
(INV.(DUB): OFF)
(INV.(Y/C): OFF)
Q3 2SD636 (AMP)
Q17 2SB641 (MANUAL LEVEL CONT.)
Q4 2SD636 (AGC/MANU. SELECT)
Q5 2SD636 (AGC/MANU. SELECT)
IC2 AN6306S (AGC)
AMP
CLAMP
PB AMP
AGC
AGC DET
PULSE DELAY
TP32001 0.8Vp-p S-VHS/VHS REC
TP1
Q10 2SD636 (AMP)
FL1 L.P.F 5MHz
Q12 2SB641 (AMP)
Q13 2SC2
TP32003 1.4Vp-p S-VHS/VHS
Q7 2SB641 (SYNC SEPA.)
IC3 μPC319G (SYNC SEPA.)
Q6 2SD636 (AMP)
IC11 MN4528BS
IC6 MN74HC221S (CLAMP GEN.)
IC7 MN74HC221S (CLAMP GEN.)
IC14 MN74HC74S
IC15 MN74HC08S
5V REG
X1 VSX029
17.7MHz VCO
Q11 2SD636 (AMP)
IC8 AN612 (FREQ. SELECT)
BM
(4.43MHz TRAP)
(L.P.F)
Q20 2SD636 (AMP)
TP2
TPGND
IC31 MN74HC74S (1/4 DIVIDER)
IC33 AN79L05 (-5VREG.)
-5V REG
IC43 NJM082BM
IC42 MN4053BS
IC9 NJM082BM (BUFFER)
IC10 μPC358G (ERROR AMP)
CLK PHASE
TP32002 1.0Vp-p S-VHS/VHS REC
IC23 MN74HC161S (RESET TIMING GENE.)
IC24 MN74HC161S (RESET TIMING GENE.)
IC25 MN74HC161S (RESET TIMING GENE.)
IC26 MN74HC161S (RESET TIMING GENE.)
IC27 MN74HC161S (RESET TIMING GENE.)
IC28 MN74HC161S (RESET TIMING GENE.)
IC29 MN74HC32S (1/4)
IC32 MN74HC240S
(TIMING AMP)
IC40 MN74HC
CLEAR
ENABLE P
T(DATA INPUT)
RIPPLE CARRY OUTPUT
CLOCK
GND
LOAD
VCC
A LINE
B LINE
G
F
E
D
C
B
A
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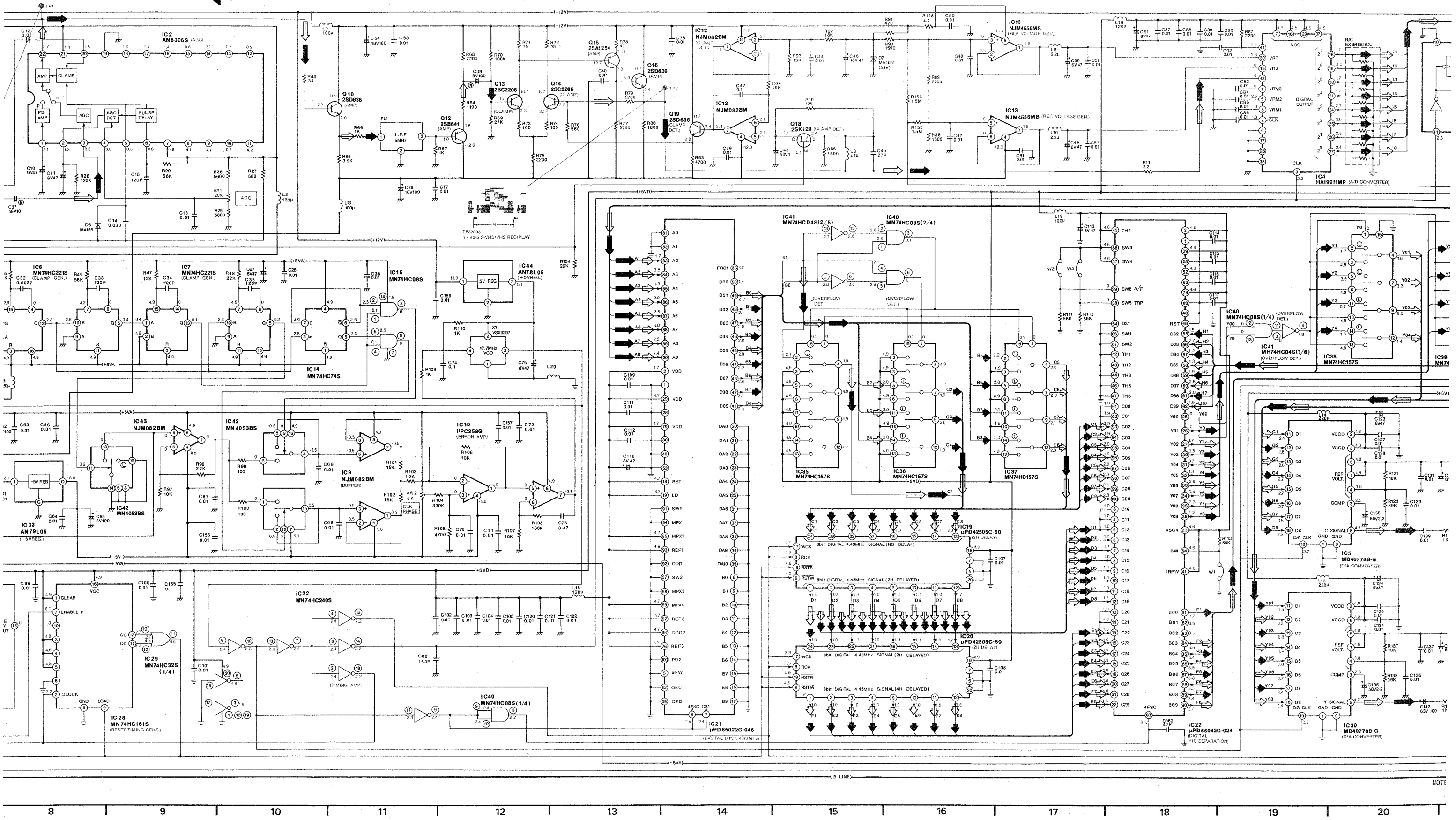
VHS).

MAIN SIGNAL PATH IN REC MODE(S-VHS).


TP1
(+12V)
IC2 AN6306S (AGC)
AMP
CLAMP
PB AMP
AGC
AGC DET
PULSE DELAY
Q10 2SD636 (AMP)
FL1 L.P.F 5MHz
Q12 2SB641 (AMP)
Q13 2SC2206 (CLAMP)
Q14 2SC2206 (CLAMP)
Q15 2SA1254 (AMP)
Q16 2SD636 (AMP)
Q19 2SD636 (CLAMP DET.)
TP2
IC12 NJM082BM (CLAMP DET.)
IC12 NJM082BM
Q18 2SK128 (CLAMP DET.)
D7 MA4051 (5.1V)
IC13 NJM4556MB (REF. VOLTAGE GEN.)
IC13 NJM4556MB (REF. VOLTAGE GEN.)
IC4 HA19211MP (A/D CONVERTER)
VRT
VRB
VRM3
VRM2
VRM1
CLK
DIGITAL OUTPUT
RA1 EXBR8E152J
TP32003
1.4Vp-p S-VHS/VHS REC/PLAY
(+5VD)
IC6 MN74HC221S (CLAMP GEN.)
IC7 MN74HC221S (CLAMP GEN.)
IC14 MN74HC74S
IC15 MN74HC08S
IC44 AN78L05 (+5VREG.)
5V REG
X1 VSX0297
17.7MHz VCO
(+5VA)
IC43 NJM082BM
IC42 MN4053BS
IC42 MN4053BS
IC9 NJM082BM (BUFFER)
IC10 μPC358G (ERROR AMP)
VR2 5K CLK PHASE
-5V REG
IC33 AN79L05 (-5VREG.)
(-5V)
IC28 MN74HC161S (RESET TIMING GENE.)
CLEAR
ENABLE P
CLOCK
LOAD
IC29 MN74HC32S (1/4)
IC32 MN74HC240S
(TIMING AMP)
IC40 MN74HC08S(1/4)
IC21 μPD65022G-046 (DIGITAL B.P.F. 4.43MHz)
FRST
RST
LD
4FSC
CK1
IC41 MN74HC04S(2/6)
IC40 MN74HC08S(2/4)
(OVERFLOW DET.)
(OVERFLOW DET.)
IC35 MN74HC157S
IC36 MN74HC157S
IC37 MN74HC157S
IC19 μPD42505C-50 (2H DELAY)
8bit DIGITAL 4.43MHz SIGNAL (NO DELAY)
8bit DIGITAL 4.43MHz SIGNAL (2H DELAYED)
IC20 μPD42505C-50 (2H DELAY)
8bit DIGITAL 4.43MHz SIGNAL (2H DELAYED)
8bit DIGITAL 4.43MHz SIGNAL (4H DELAYED)
WCK
RCK
RSTR
RSTW
IC22 μPD65042G-024 (DIGITAL Y/C SEPARATION)
TH4
SW3
SW4
SW6 A/F
SW5 TRP
VSC4
BW
TRPW
IC40 MN74HC08S(1/4) (OVERFLOW DET.)
IC41 MH74HC04S(1/6) (OVERFLOW DET.)
IC38 MN74HC157S
IC39 MN74
IC5 MB40778B-G (D/A CONVERTER)
IC30 MB40778B-G (D/A CONVERTER)
VCCD
REF VOLT.
COMP
C SIGNAL
Y SIGNAL
D/A CLK
GND
(+5VA)
(5 LINE)
NOTE
8
9
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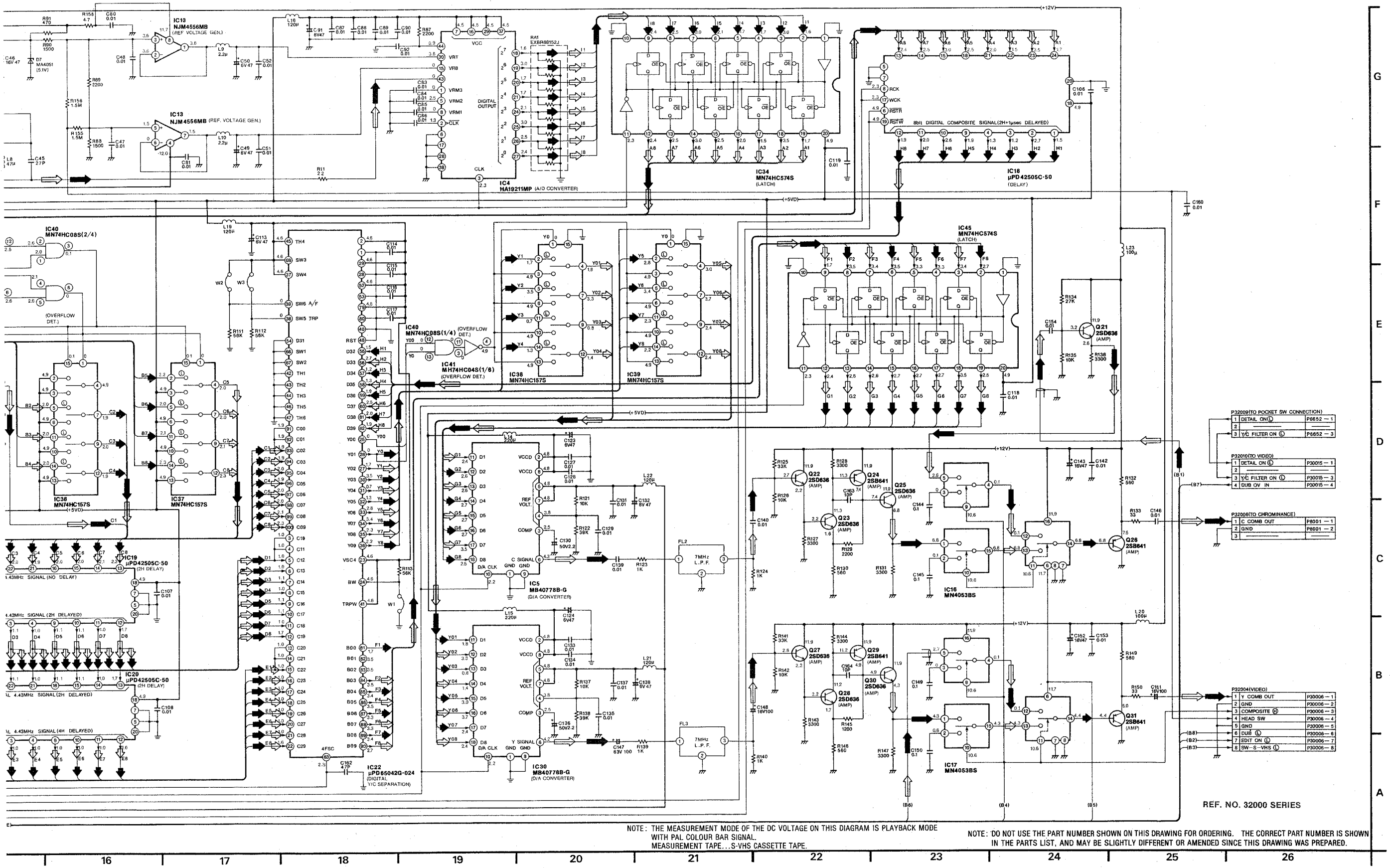
IC13 NJM4556MB (REF. VOLTAGE GEN.)
IC4 HA19211MP (A/D CONVERTER)
DIGITAL OUTPUT
RA1 EXBR8152J
IC34 MN74HC574S (LATCH)
IC18 μPD42505C-50 (DELAY)
8bit DIGITAL COMPOSITE SIGNAL(2H+1μsec DELAYED)
IC40 MN74HC08S(2/4)
(OVERFLOW DET.)
IC36 MN74HC157S
IC37 MN74HC157S
IC19 μPD42505C-50 (2H DELAY)
4.43MHz SIGNAL (NO DELAY)
4.43MHz SIGNAL (2H DELAYED)
IC20 μPD42505C-50 (2H DELAY)
4.43MHz SIGNAL (4H DELAYED)
IC22 μPD65042G-024 (DIGITAL Y/C SEPARATION)
IC40 MN74HC08S(1/4) (OVERFLOW DET.)
IC41 MN74HC04S(1/6) (OVERFLOW DET.)
IC38 MN74HC157S
IC39 MN74HC157S
IC45 MN74HC574S (LATCH)
IC5 MB40778B-G (D/A CONVERTER)
IC30 MB40778B-G (D/A CONVERTER)
FL2 7MHz L.P.F.
FL3 7MHz L.P.F.
Q21 2SD636 (AMP)
Q22 2SD636 (AMP)
Q23 2SD636 (AMP)
Q24 2SB641 (AMP)
Q25 2SD636 (AMP)
Q26 2SB641 (AMP)
Q27 2SD636 (AMP)
Q28 2SD636 (AMP)
Q29 2SB641 (AMP)
Q30 2SD636 (AMP)
Q31 2SB641 (AMP)
IC16 MN4053BS
IC17 MN4053BS
(+12V)
(+5VD)
(+5VD)
P32009(TO POCKET SW CONNECTION)
1 DETAIL ON Ⓛ P6652 — 1
2 —— ——
3 Y/C FILTER ON Ⓛ P6652 — 3
P32010(TO VIDEO)
1 DETAIL ON Ⓛ P30015 — 1
2 —— ——
3 Y/C FILTER ON Ⓛ P30015 — 3
4 DUB OV IN P30015 — 4
P32006(TO CHROMINANCE)
1 C COMB OUT P8001 — 1
2 GND P8001 — 2
3 —— ——
P32004(VIDEO)
1 Y COMB OUT P30006 — 1
2 GND P30006 — 2
3 COMPOSITE Ⓗ P30006 — 3
4 HEAD SW P30006 — 4
5 GND P30006 — 5
6 DUB Ⓛ P30006 — 6
7 EDIT ON Ⓛ P30006 — 7
8 SW-S-VHS Ⓛ P30006 — 8
G
F
E
D
C
B
A
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23
24
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26

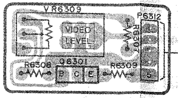
REF. NO. 32000 SERIES

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

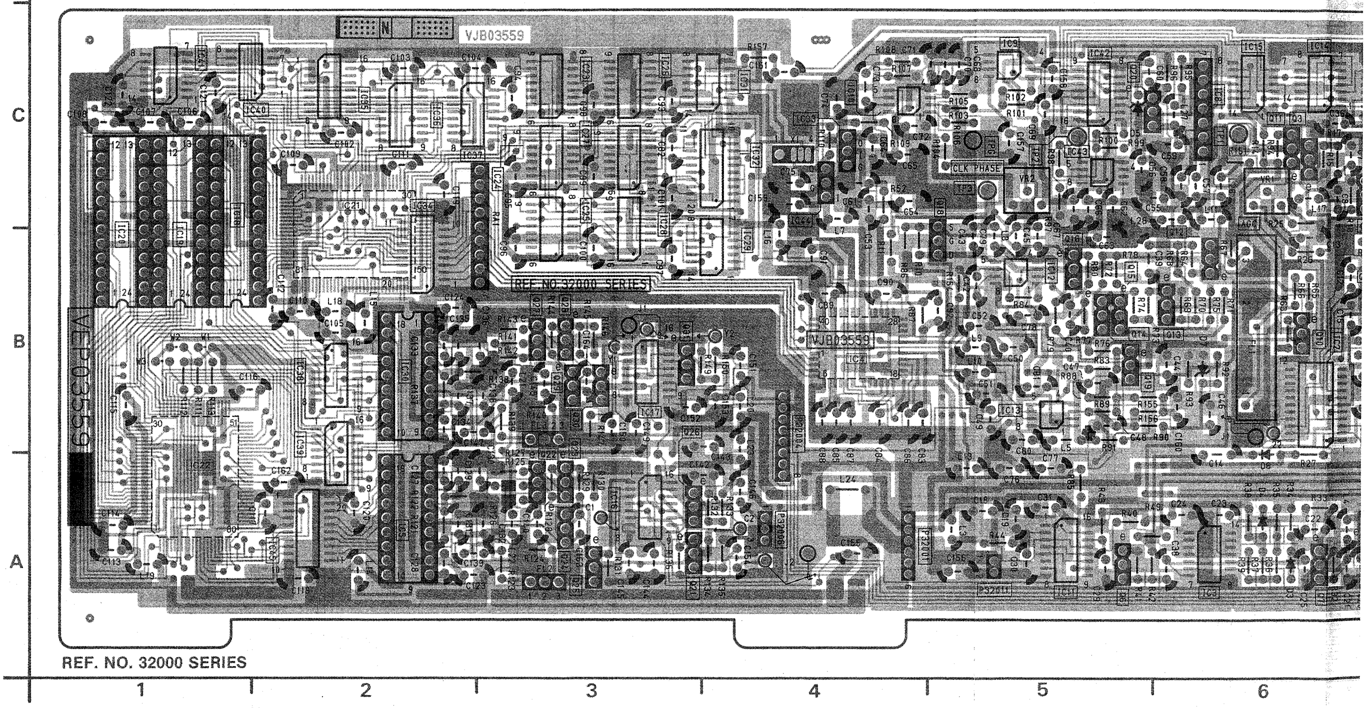
Y/C SEPARATION C.B.A. (VEP03559A)

VIDEO VR C.B.A.
(VEP00J59B)


VR6309
VIDEO LEVEL
PS312
R6307
Q6301
R6308
R6309
B
C
E

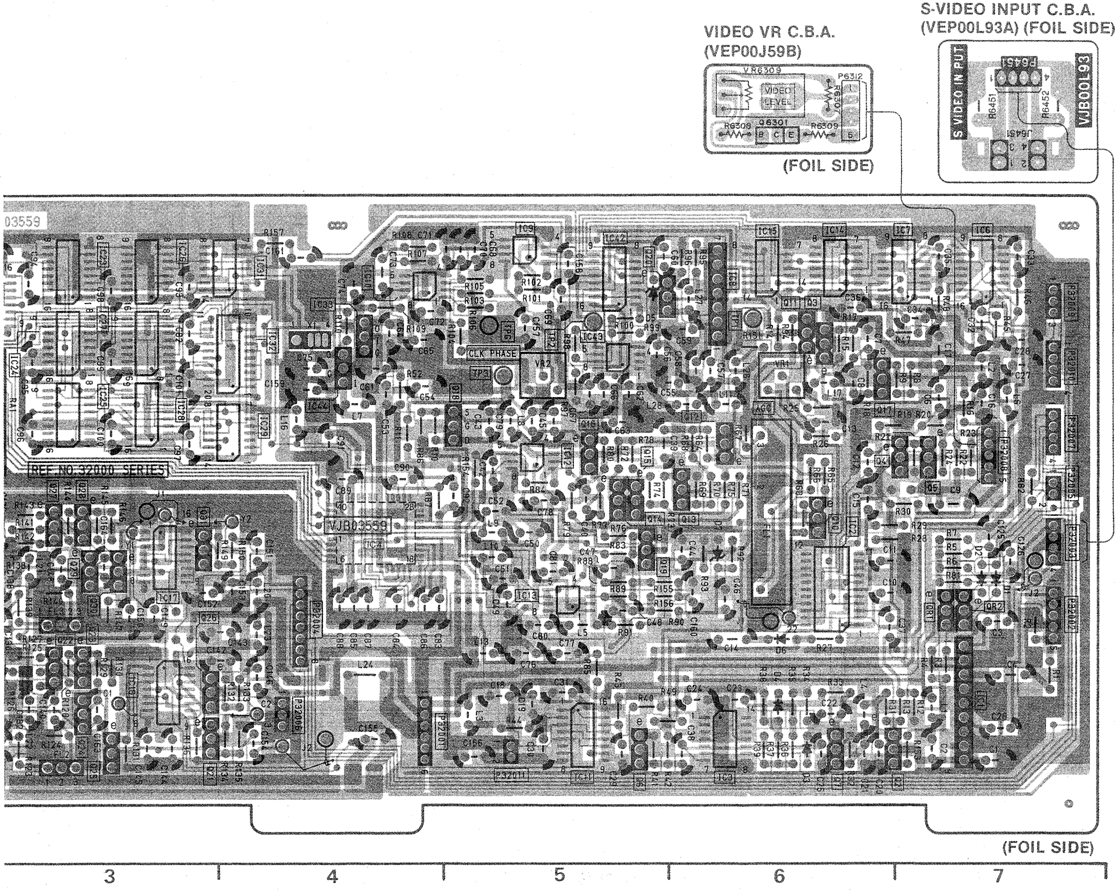
(FOIL SIDE)

Y/C SEPARATION C.B.A. (VEP03559A)


D
C
B
A
1
2
3
4
5
6
VJB03559
VEP03559
REF. NO. 32000 SERIES
CLK PHASE
IC20
IC19
IC18
IC21
IC22
IC24
IC25
IC28
IC29
IC30
IC31
IC32
IC33
IC34
IC35
IC36
IC37
IC38
IC39
IC40
IC41
IC42
IC43
IC44
VR1
VR2
L24
P32001
P32004
P32006
P32011
REF. NO. 32000 SERIES

VIDEO VR C.B.A. (VEP00J59B) (FOIL SIDE)

S-VIDEO INPUT C.B.A. (VEP00L93A) (FOIL SIDE)


VR6309
VIDEO LEVEL
P6312
R6310
Q6301
R6308
R6309
B C E
S VIDEO IN PUT
VJB00L93
P6451
R6451
R6452
J6451
03559
REF.NO.32000 SERIES
VJB03559
CLK PHASE
TPG
TP3
VR1
VR2
AGC
(FOIL SIDE)
3
4
5
6
7

Y/C SEP., S-Video Input & Video VR C.B.A.		
Transistor		
Q6301	D-6	Ⓕ
Q32002	A-6	Ⓕ
Q32003	C-6	Ⓕ
Q32004	B-6	Ⓕ
Q32005	B-7	Ⓕ
Q32006	A-5	Ⓕ
Q32007	A-6	Ⓕ
Q32010	B-6	Ⓕ
Q32011	C-6	Ⓕ
Q32012	B-6	Ⓕ
Q32013	B-6	Ⓕ
Q32014	B-5	Ⓕ
Q32015	B-5	Ⓕ
Q32016	B-5	Ⓕ
Q32017	B-6	Ⓕ
Q32018	C-4	Ⓕ
Q32019	B-5	Ⓕ
Q32020	C-5	Ⓕ
Q32021	A-3	Ⓕ
Q32022	A-3	Ⓕ
Q32023	A-3	Ⓕ
Q32024	A-3	Ⓕ
Q32025	A-3	Ⓕ
Q32026	A-3	Ⓕ
Q32027	B-3	Ⓕ
Q32028	B-3	Ⓕ
Q32029	B-3	Ⓕ
Q32030	B-3	Ⓕ
Q32031	B-3	Ⓕ
Transistor & Resistor		
QR32001	B-7	Ⓕ
QR32002	B-7	Ⓕ
Integrated Circuit		
IC32001	A-7	Ⓕ
IC32002	B-6	Ⓕ
IC32003	A-6	Ⓕ
IC32004	B-4	Ⓒ
IC32005	A-2	Ⓕ
IC32006	C-7	Ⓕ
IC32007	C-7	Ⓕ
IC32008	C-6	Ⓕ
IC32009	C-5	Ⓕ
IC32010	C-4	Ⓕ
IC32011	A-5	Ⓕ
IC32012	B-5	Ⓕ
IC32013	B-5	Ⓕ
IC32014	C-6	Ⓕ
IC32015	C-6	Ⓕ
IC32016	A-3	Ⓕ
IC32017	B-3	Ⓕ
IC32018	B-1	Ⓕ
IC32019	B-1	Ⓕ
IC32020	B-1	Ⓕ
IC32021	B-2	Ⓒ
IC32022	A-1	Ⓒ
IC32023	C-3	Ⓕ
IC32024	C-3	Ⓕ
IC32025	C-3	Ⓕ
IC32026	C-3	Ⓕ
IC32027	C-3	Ⓕ
IC32028	B-3	Ⓕ
IC32029	B-4	Ⓕ
IC32030	B-2	Ⓕ
IC32031	C-4	Ⓕ
IC32032	C-4	Ⓕ
IC32033	C-4	Ⓕ
IC32034	C-2	Ⓕ
IC32035	C-2	Ⓕ
IC32036	C-2	Ⓕ
IC32037	C-2	Ⓕ
IC32038	B-2	Ⓕ
IC32039	B-2	Ⓕ
IC32040	C-1	Ⓕ
IC32041	C-1	Ⓕ
IC32042	C-5	Ⓕ
IC32043	C-5	Ⓕ
IC32044	C-4	Ⓕ
IC32045	A-2	Ⓕ
Test Point		
TP32001	C-6	Ⓕ
TP32002	C-5	Ⓕ
TP32003	C-5	Ⓕ
TPG	C-5	Ⓕ
Adjustment		
VR6309	D-6	Ⓕ
VR32001	B-6	Ⓕ
VR32002	B-5	Ⓕ
Connector		
P6312	D-6	Ⓕ
P6451	D-7	Ⓕ
P32002	B-7	Ⓕ
P32003	B-7	Ⓕ
P32004	A-4	Ⓕ
P32005	B-7	Ⓕ
P32006	A-4	Ⓕ
P32007	B-7	Ⓕ
P32008	B-7	Ⓕ
P32009	C-7	Ⓕ
P32010	C-7	Ⓕ
P32011	A-5	Ⓕ

ADDRESS INFORMATION
Ⓒ ··· COMPONENT SIDE
Ⓕ ··· FOIL SIDE

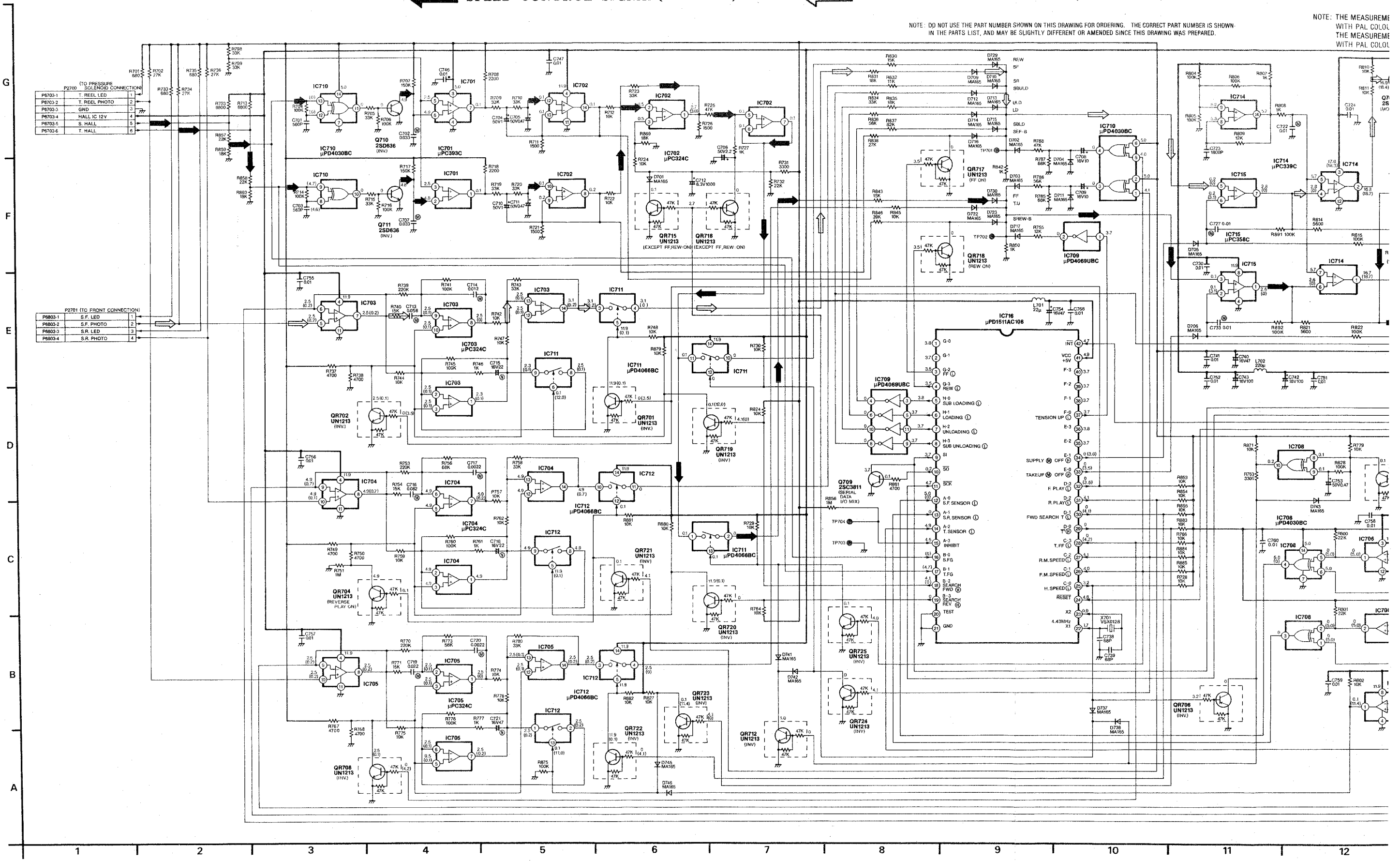
REEL SERVO SCHEMATIC DIAGRAM

⬅ SPEED CONTROL SIGNAL(FF MODE).

⇦ TENSION CONTROL SIGNAL(FWD MODE).

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREME
WITH PAL COLOU
THE MEASUREME
WITH PAL COLOU


G
F
E
D
C
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A
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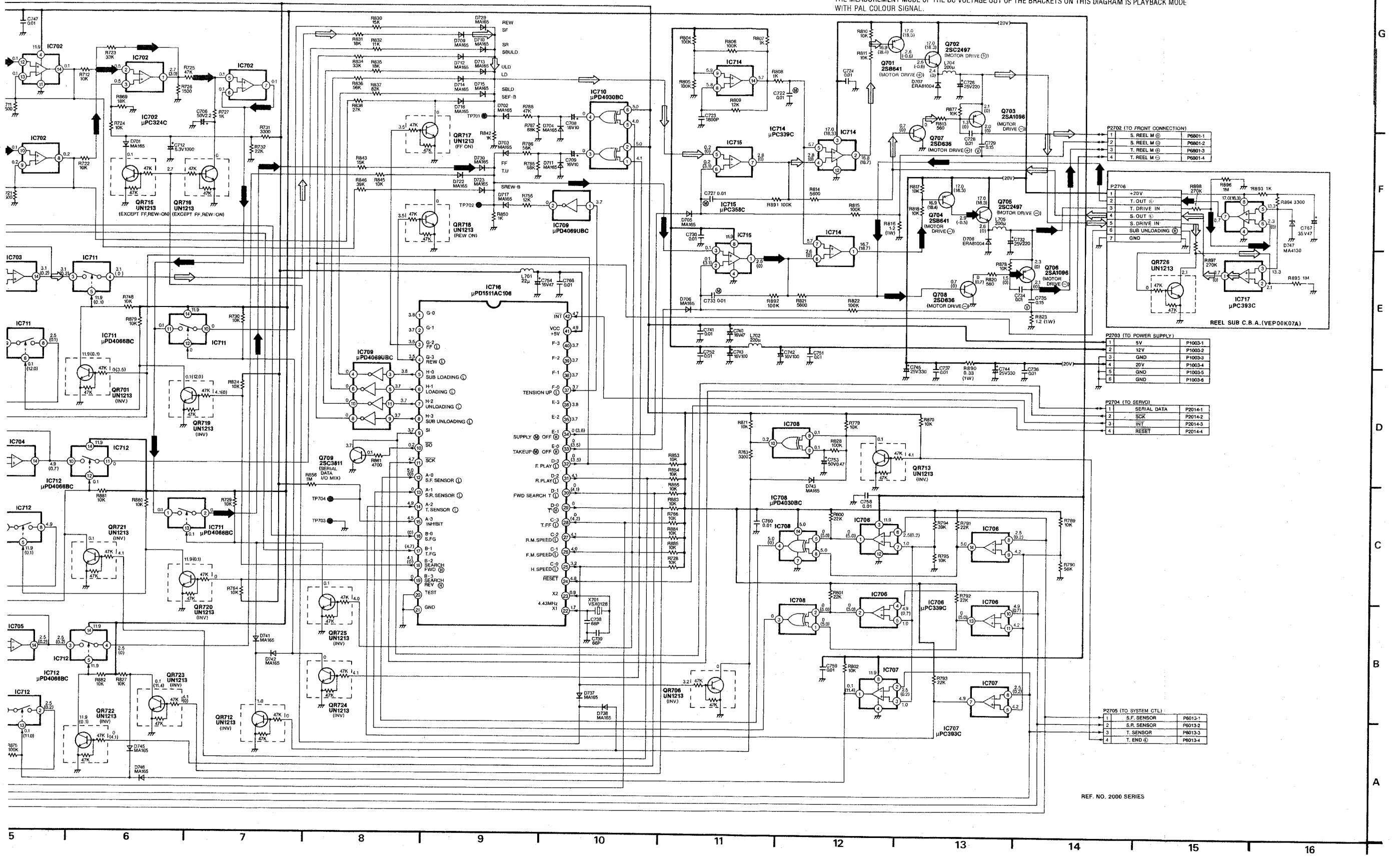
12
P2700 (TO PRESSURE SOLENOID CONNECTION)
P6703-1 T. REEL LED 1
P6703-2 T. REEL PHOTO 2
P6703-3 GND 3
P6703-4 HALL IC 12V 4
P6703-5 S. HALL 5
P6703-6 T. HALL 6
P2701 (TO FRONT CONNECTION)
P6803-1 S.F. LED 1
P6803-2 S.F. PHOTO 2
P6803-3 S.R. LED 3
P6803-4 S.R. PHOTO 4
IC710 μPD4030BC
Q710 2SD636 (INV.)
Q711 2SD636 (INV.)
IC701 μPC393C
IC702 μPC324C
QR715 UN1213 (EXCEPT FF,REW ON)
QR718 UN1213 (EXCEPT FF,REW ON)
IC703 μPC324C
IC711 μPD4066BC
QR702 UN1213 (INV.)
QR701 UN1213 (INV.)
QR719 UN1213 (INV.)
IC704 μPC324C
IC712 μPD4066BC
QR704 UN1213 (REVERSE PLAY ON)
QR721 UN1213 (INV.)
QR720 UN1213 (INV.)
IC705 μPC324C
QR708 UN1213 (INV.)
QR722 UN1213 (INV.)
QR723 UN1213 (INV.)
QR712 UN1213 (INV.)
QR717 UN1213 (FF ON)
QR718 UN1213 (REW ON)
IC709 μPD4069UBC
Q709 2SC3811 (SERIAL DATA I/O MIX)
QR725 UN1213 (INV.)
QR724 UN1213 (INV.)
IC716 μPD1511AC106
G-0
G-1
G-2 FF Ⓛ
G-3 REW Ⓛ
H-0 SUB LOADING Ⓛ
H-1 LOADING Ⓛ
H-2 UNLOADING Ⓛ
H-3 SUB UNLOADING Ⓛ
SI
SO
SCK
A-0 S.F. SENSOR Ⓛ
A-1 S.R. SENSOR Ⓛ
A-2 T. SENSOR Ⓛ
A-3 INHIBIT
B-0 S.FG
B-1 T.FG
B-2 SEARCH FWD Ⓗ
B-3 SEARCH REV. Ⓗ
TEST
GND
INT
VCC +5V
F-3
F-2
F-1
F-0 TENSION UP Ⓛ
E-3
E-2
E-1 SUPPLY Ⓜ OFF Ⓗ
E-0 TAKEUP Ⓜ OFF Ⓗ
D-3 F. PLAY Ⓛ
D-2 R. PLAY Ⓛ
D-1 FWD SEARCH T Ⓛ
D-0 T Ⓗ
C-3 T. FF Ⓛ
C-2 R.M. SPEED Ⓛ
C-1 F.M. SPEED Ⓛ
C-0 H. SPEED Ⓛ
RESET
X2
4.43MHz X1
X701 VSX0128
REW
SF
SR
SBULD
ULD
LD
SBLD
SEF-B
FF
TU
SREW-B
TP701
TP702
TP703
TP704
IC710 μPD4030BC
IC714 μPC339C
IC715 μPC358C
IC709 μPD4069UBC
QR706 UN1213 (INV.)
IC708 μPD4030BC
IC706

ONTROL SIGNAL(FF MODE). ⇦ TENSION CONTROL SIGNAL(FWD MODE).

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS STOP MODE WITH PAL COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.



IC702 μPC324C
QR715 UN1213 (EXCEPT FF,REW·ON)
QR716 UN1213 (EXCEPT FF,REW·ON)
QR717 UN1213 (FF ON)
QR718 UN1213 (REW ON)
IC710 μPD4030BC
IC709 μPD4069UBC
IC716 μPD1511AC106
Q709 2SC3811 (SERIAL DATA I/O MIX)
IC711 μPD4066BC
IC712 μPD4066BC
QR701 UN1213 (INV.)
QR719 UN1213 (INV)
QR720 UN1213 (INV)
QR721 UN1213 (INV)
QR722 UN1213 (INV)
QR723 UN1213 (INV)
QR712 UN1213 (INV)
QR724 UN1213 (INV)
QR725 UN1213 (INV)
QR706 UN1213 (INV.)
QR713 UN1213 (INV.)
IC714 μPC339C
IC715 μPC358C
Q701 2SB641 (MOTOR DRIVE ⊕)
Q702 2SC2497 (MOTOR DRIVE ⊕)
Q703 2SA1096 (MOTOR DRIVE ⊖)
Q704 2SB641 (MOTOR DRIVE ⊖)
Q705 2SC2497 (MOTOR DRIVE ⊖)
Q706 2SA1096 (MOTOR DRIVE ⊖)
Q707 2SD636 (MOTOR DRIVE ⊕)
Q708 2SD636 (MOTOR DRIVE ⊖)
IC708 μPD4030BC
IC706 μPC339C
IC707 μPC393C
P2702 (TO FRONT CONNECTION)
1 S. REEL M ⊕ P6801-1
2 S. REEL M ⊖ P6801-2
3 T. REEL M ⊕ P6801-3
4 T. REEL M ⊖ P6801-4
P2706
1 +20V
2 T. OUT Ⓛ
3 T. DRIVE IN
4 S. OUT Ⓛ
5 S. DRIVE IN
6 SUB UNLOADING Ⓗ
7 GND
QR726 UN1213
IC717 μPC393C
REEL SUB C.B.A.(VEP00K07A)
P2703 (TO POWER SUPPLY)
1 5V P1003-1
2 12V P1003-2
3 GND P1003-3
4 20V P1003-4
5 GND P1003-5
6 GND P1003-6
P2704 (TO SERVO)
1 SERIAL DATA P2014-1
2 SCK P2014-2
3 INT P2014-3
4 RESET P2014-4
P2705 (TO SYSTEM CTL)
1 S.F. SENSOR P6013-1
2 S.R. SENSOR P6013-2
3 T. SENSOR P6013-3
4 T. END Ⓛ P6013-4
REF. NO. 2000 SERIES
G
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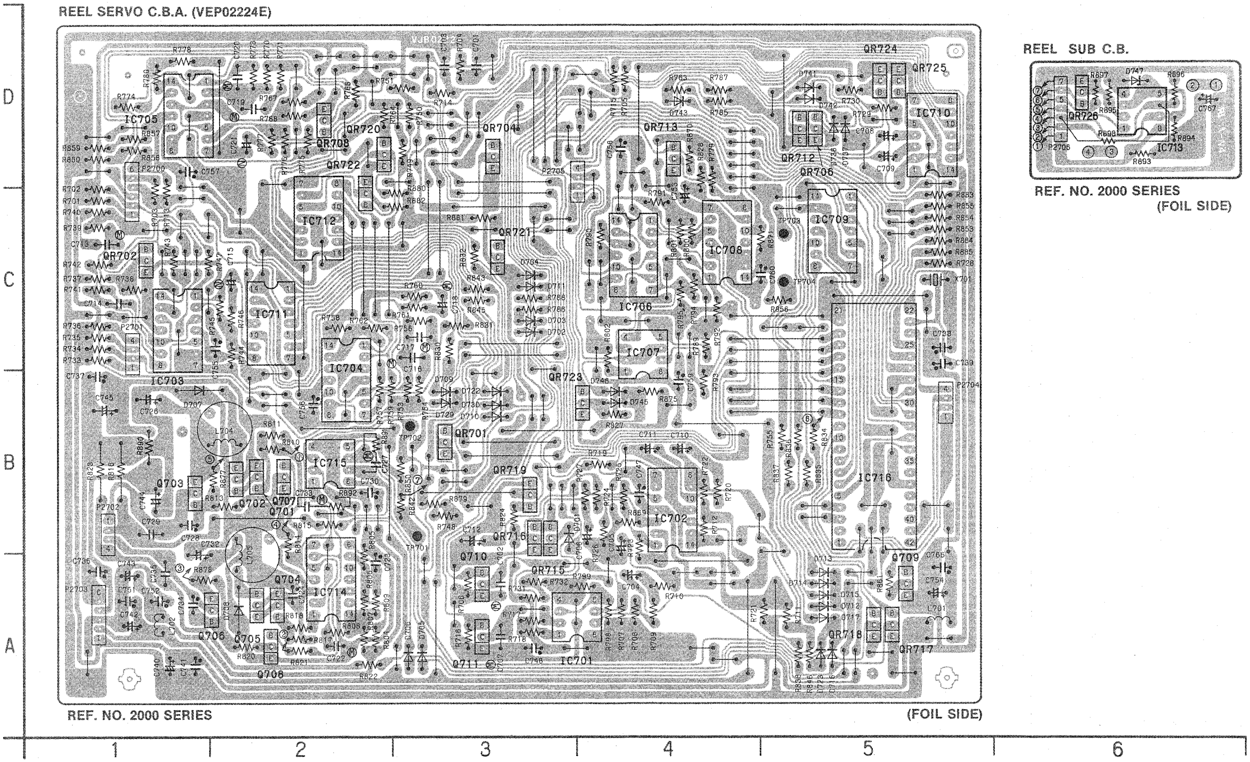
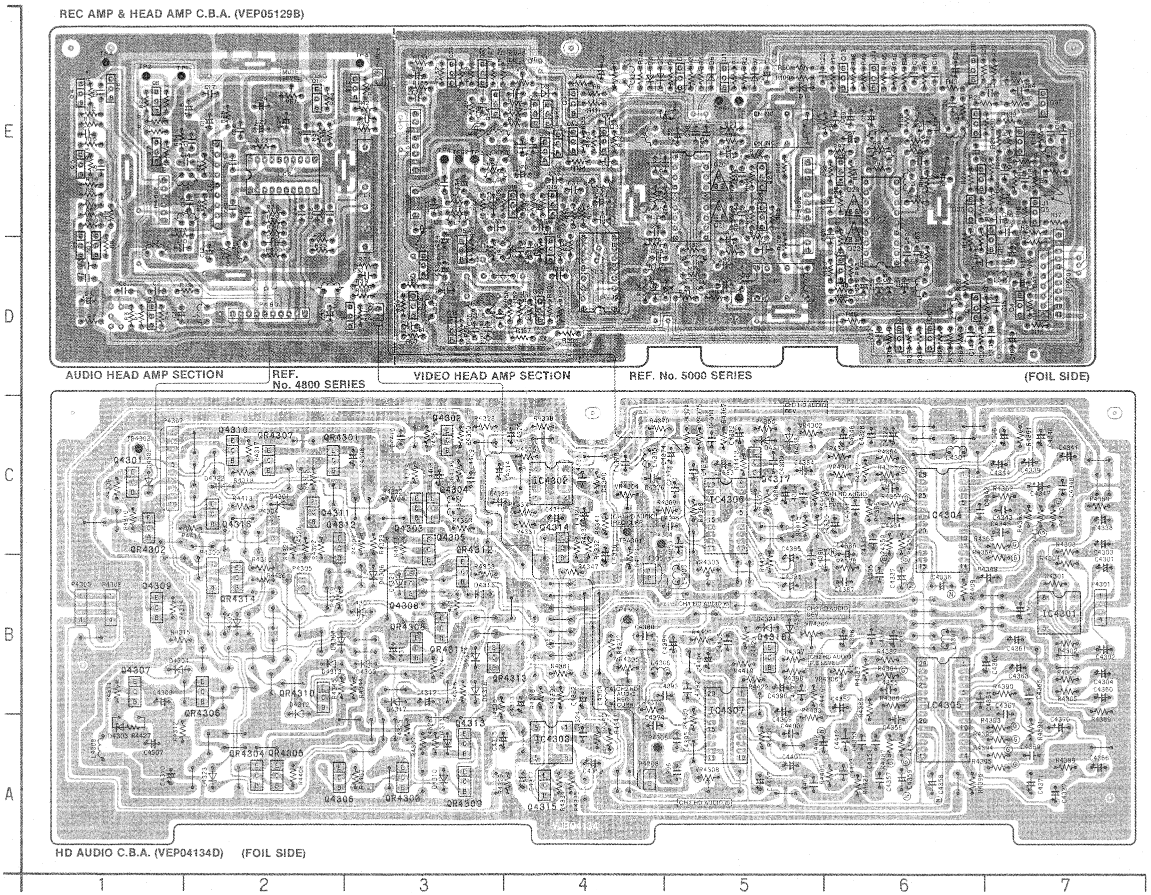

REEL SERVO C.B.A. (VEP02224E)
REF. NO. 2000 SERIES
(FOIL SIDE)
REEL SUB C.B.
REF. NO. 2000 SERIES
(FOIL SIDE)
D
C
B
A
1
2
3
4
5
6
IC701
IC702
IC703
IC704
IC705
IC706
IC707
IC708
IC709
IC710
IC711
IC712
IC713
IC714
IC715
IC716
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
Q711
QR701
QR702
QR704
QR706
QR708
QR712
QR713
QR715
QR716
QR717
QR718
QR719
QR720
QR721
QR722
QR723
QR724
QR725
QR726
TP701
TP702
TP703
TP704
P2700
P2701
P2702
P2703
P2704
P2705
P2706
L701
L704
L705
X701

Reel Servo, Reel Sub C.B.A.	
Transistor	
Q2701	B-2
Q2702	B-2
Q2703	B-1
Q2704	A-2
Q2705	A-2
Q2706	A-2
Q2707	B-2
Q2708	A-2
Q2709	A-5
Q2710	A-3
Q2711	A-3
Transistor & Resistor	
QR2701	B-3
QR2702	C-1
QR2704	D-3
QR2706	D-5
QR2708	D-2
QR2712	D-5
QR2713	D-4
QR2715	B-3
QR2716	B-3
QR2717	A-5
QR2718	A-5
QR2719	B-3
QR2720	D-2
QR2721	C-3
QR2722	C-2
QR2723	B-4
QR2724	D-5
QR2725	D-5
Integrated Circuit	
IC2701	A-3
IC2702	B-4
IC2703	C-1
IC2704	B-2
IC2705	D-1
IC2706	C-4
IC2707	C-4
IC2708	C-4
IC2709	C-5
IC2710	D-5
IC2711	C-2
IC2712	C-2
IC2713	C-6
IC2714	A-2
IC2715	B-2
IC2716	B-5
Test Point	
TP2701	B-3
TP2702	B-3
TP2703	C-5
TP2704	C-5
Connector	
P2700	D-1
P2701	C-1
P2702	B-1
P2703	A-1
P2704	B-5
P2705	D-3
P2706	C-6

ADDRESS INFORMATION

HD AUDIO C.B.A. (VEP04134D), REC AMP & HEAD AMP C.B.A. (VEP05129B)


REC AMP & HEAD AMP C.B.A. (VEP05129B)
AUDIO HEAD AMP SECTION
REF.
No. 4800 SERIES
VIDEO HEAD AMP SECTION
REF. No. 5000 SERIES
(FOIL SIDE)
HD AUDIO C.B.A. (VEP04134D)
(FOIL SIDE)
IC4301
IC4302
IC4303
IC4304
IC4305
IC4306
IC4307
Q4301
Q4302
Q4303
Q4304
Q4305
Q4306
Q4307
Q4308
Q4309
Q4310
Q4311
Q4312
Q4313
Q4314
Q4315
Q4316
Q4317
Q4318
QR4301
QR4302
QR4303
QR4304
QR4305
QR4306
QR4307
QR4308
QR4309
QR4310
QR4311
QR4312
QR4313
QR4314
CH1 HD AUDIO REC CURR
CH2 HD AUDIO REC CURR
CH1 HD AUDIO DEV.
CH2 HD AUDIO DEV.
CH1 HD AUDIO EVEN
CH2 HD AUDIO P.B. LEVEL
CH1 HD AUDIO
CH2 HD AUDIO
VJB04134
E
D
C
B
A
1
2
3
4
5
6
7

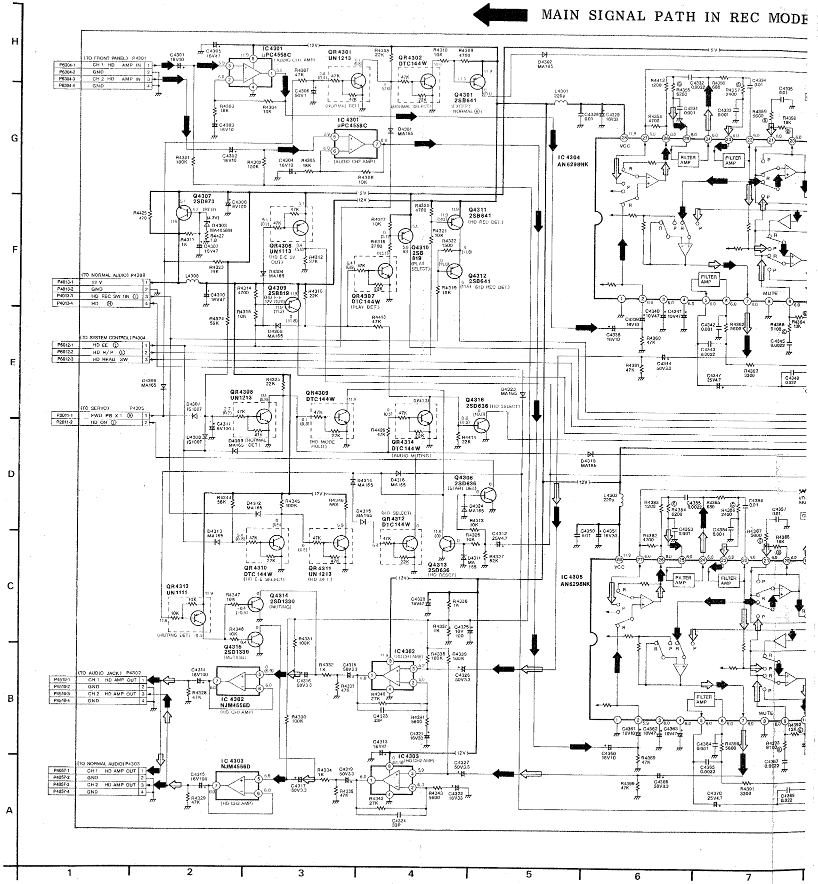
HD Audio C.B.A.	
Transistor	
Q4301	C-1
Q4302	C-3
Q4303	C-3
Q4304	C-3
Q4305	C-3
Q4306	A-2
Q4307	B-1
Q4308	B-3
Q4309	B-1
Q4310	C-2
Q4311	C-2
Q4312	C-2
Q4313	A-3
Q4314	C-4
Q4315	A-4
Q4316	C-2
Q4317	C-5
Q4318	B-5
Transistor & Resistor	
QR4301	C-2
QR4302	C-1
QR4303	A-3
QR4304	A-2
QR4305	A-2
QR4306	B-2
QR4307	C-2
QR4308	B-3
QR4309	A-3
QR4310	B-2
QR4311	B-3
QR4312	B-3
QR4313	B-3
QR4314	B-2
Integrated Circuit	
IC4301	B-7
IC4302	C-4
IC4303	A-4
IC4304	C-6
IC4305	B-6
IC4306	C-5
IC4307	A-5
Test Point	
TP4301	C-4
TP4302	B-4
TP4303	C-1
TP4304	C-4
TP4305	A-4
Adjustment	
VR4301	C-6
VR4302	C-5
VR4303	B-5
VR4304	C-4
VR4305	B-4
VR4306	B-6
VR4307	B-5
VR4308	A-5
Connector	
P4301	B-7
P4302	B-1
P4303	B-1
P4304	C-2
P4305	B-2
P4306	B-4
P4307	C-1
P4308	A-4
P4309	B-2

ADDRESS INFORMATION

Rec & Head Amp C.B.A.	
Transistor	
Q4801	D-1
Q4802	D-1
Q4803	D-1
Q4804	E-1
Q4805	E-1
Q4806	E-1
Q4807	E-1
Q4808	E-1
Q4809	D-3
Q4810	E-3
Q4811	E-2
Q5001	E-5
Q5002	E-5
Q5003	E-4
Q5004	D-7
Q5005	E-7
Q5006	E-7
Q5007	E-6
Q5008	E-6
Q5009	D-6
Q5010	E-6
Q5011	D-6
Q5012	D-6
Q5013	E-6
Q5014	E-6
Q5015	D-3
Q5016	D-3
Q5017	D-4
Q5018	E-4
Q5019	E-4
Q5020	E-5
Q5021	E-5
Q5022	D-6
Q5023	E-6
Q5024	E-5
Q5025	E-5
Q5026	E-6
Q5027	D-6
Q5028	D-3
Q5029	D-3
Q5031	D-4
Q5032	E-4
Q5033	E-4
Q5034	E-3
Q5035	E-3
Q5036	E-3
Q5037	E-7
Q5038	E-6
Transistor & Resistor	
QR5001	D-7
QR5003	E-4
QR5004	E-4
QR5005	E-4
QR5006	E-4
Integrated Circuit	
IC4801	E-2
IC4802	E-2
IC5001	E-5
IC5002	E-6
IC5003	D-4
Test Point	
TP4801	E-1
TP4802	E-1
TP4803	E-3
TP4804	E-1
TP5001	D-5
TP5002	E-5
TP5003	E-3
TP5004	E-3
TPG5001	E-5
TPG5002	E-3
Adjustment	
VR4801	E-2
VR5001	E-4
Connector	
P4801	D-2
P4802	E-1
P4803	E-3
P4804	D-3
P5001	D-7
P5002	E-5
P5003	E-3
P5004	E-3

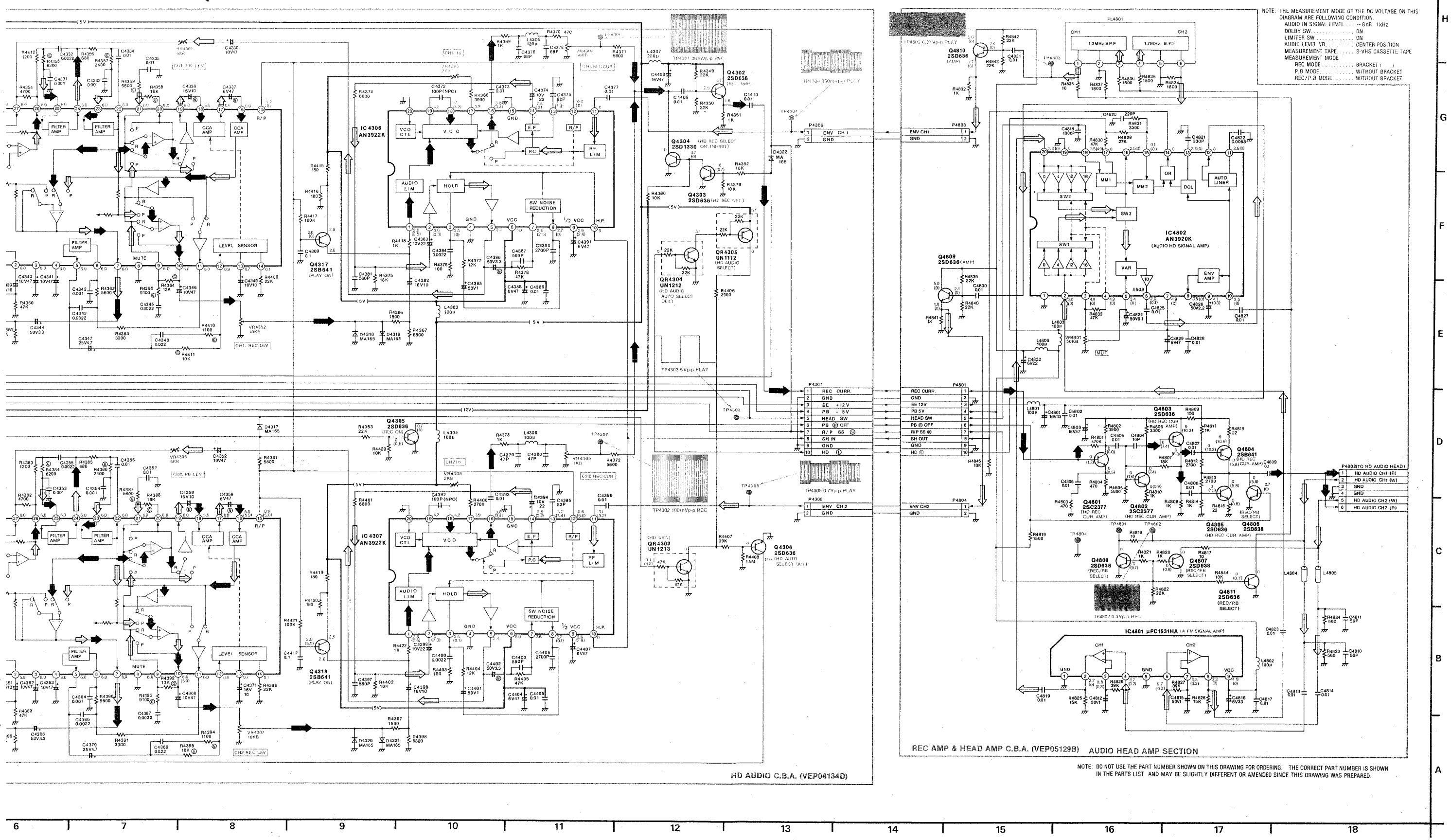
ADDRESS INFORMATION

HD AUDIO & HEAD AMP (AUDIO SECTION) SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MOD
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
(TO FRONT PANEL) P4301
CH 1 HD AMP IN
GND
CH 2 HD AMP IN
GND
IC4301 μPC4558C (AUDIO CH1 AMP)
IC4301 μPC4558C (AUDIO CH2 AMP)
QR4301 UN1213
QR4302 DTC144W
Q4301 2SB641
IC4304 AN6298NK
IC4305 AN6298NK
Q4307 2SD973
Q4311 2SB641 (HD REC DET.)
Q4312 2SB641 (HD REC DET.)
Q4310 2SB819 (PLAY SELECT)
QR4306 UN1113
Q4309 2SB819
QR4307 DTC144W (PLAY DET.)
(TO NORMAL AUDIO) P4309
12 V
GND
HD REC SW ON
HD
(TO SYSTEM CONTROL) P4304
HD EE
HD R/P
HD HEAD SW
(TO SERVO) P4305
FWD PB X 1
HD ON
QR4308 UN1213
QR4309 DTC144W
QR4314 DTC144W (AUDIO MUTING)
Q4316 2SD636 (HD SELECT)
Q4308 2SD636 (START DET.)
QR4310 DTC144W (HD E-E SELECT)
QR4311 UN1213 (HD DET.)
QR4312 DTC144W
Q4313 2SD636 (HD RESET)
QR4313 UN1111 (MUTING DET.)
Q4314 2SD1330 (MUTING)
Q4315 2SD1330 (MUTING)
IC4302 (HD CH1 AMP)
IC4303 (HD CH2 AMP)
IC 4302 NJM4556D (HD CH1 AMP)
IC 4303 NJM4556D (HD CH2 AMP)
(TO AUDIO JACK) P4302
CH 1 HD AMP OUT
GND
CH 2 HD AMP OUT
GND
(TO NORMAL AUDIO) P4303
CH 1 HD AMP OUT
GND
CH 2 HD AMP OUT
GND
FILTER AMP
MUTE
VCC

GRAM

L PATH IN REC MODE ⇐ MAIN SIGNAL PATH IN PLAYBACK MODE


IC 4306 AN3922K
IC 4307 AN3922K
IC4802 AN3920K (AUDIO HD SIGNAL AMP)
IC4801 μPC1531HA (A.FM SIGNAL AMP)
FL4801
1.3MHz B.P.F
1.7MHz B.P.F
P4306
P4307
P4308
P4801
P4803
P4804
P4802(TO HD AUDIO HEAD)
HD AUDIO C.B.A. (VEP04134D)
REC AMP & HEAD AMP C.B.A. (VEP05129B)
AUDIO HEAD AMP SECTION
6
7
8
9
10
11
12
13
14
15
16
17
18
H
G
F
E
D
C
B
A

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM ARE FOLLOWING CONDITION.

AUDIO IN SIGNAL LEVEL.... −8dB, 1kHz
DOLBY SW................ ON
LIMITER SW.............. ON
AUDIO LEVEL VR.......... CENTER POSITION
MEASUREMENT TAPE....... S-VHS CASSETTE TAPE
MEASUREMENT MODE
REC MODE.............. BRACKET ( )
P.B MODE.............. WITHOUT BRACKET
REC/P.B MODE.......... WITHOUT BRACKET

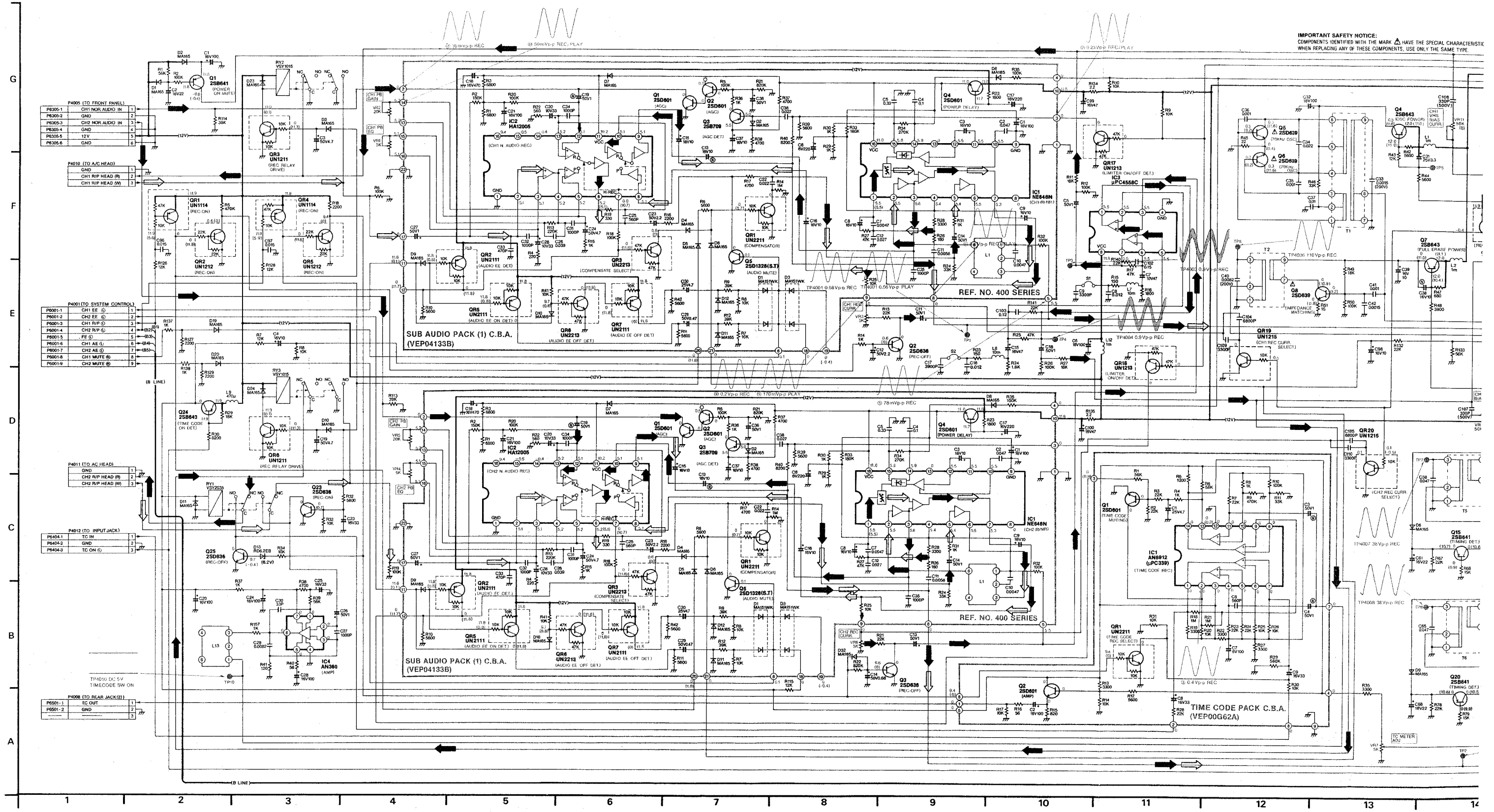
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NORMAL AUDIO, SUB AUDIO PACK (1), SUB AUDIO PACK (2), TIME CODE PACK & METER SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE.

MAIN SIGNAL PATH IN PLAYBACK MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTI
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
P4005 (TO FRONT PANEL)
P4010 (TO A/C HEAD)
P4001 (TO SYSTEM CONTROL)
P4011 (TO AC HEAD)
P4012 (TO INPUT JACK)
P4008 (TO REAR JACK(2))
TP4010 DC 5V TIMECODE SW ON
SUB AUDIO PACK (1) C.B.A. (VEP04133B)
SUB AUDIO PACK (1) C.B.A. (VEP04133B)
REF. NO. 400 SERIES
REF. NO. 400 SERIES
TIME CODE PACK C.B.A. (VEP00G62A)
IC2 HA12005
IC1 NE646N
IC3 μPC4558C
IC1 AN6912 (μPC339)
IC4 AN360 (AMP)
(B LINE)
TC METER ADJ

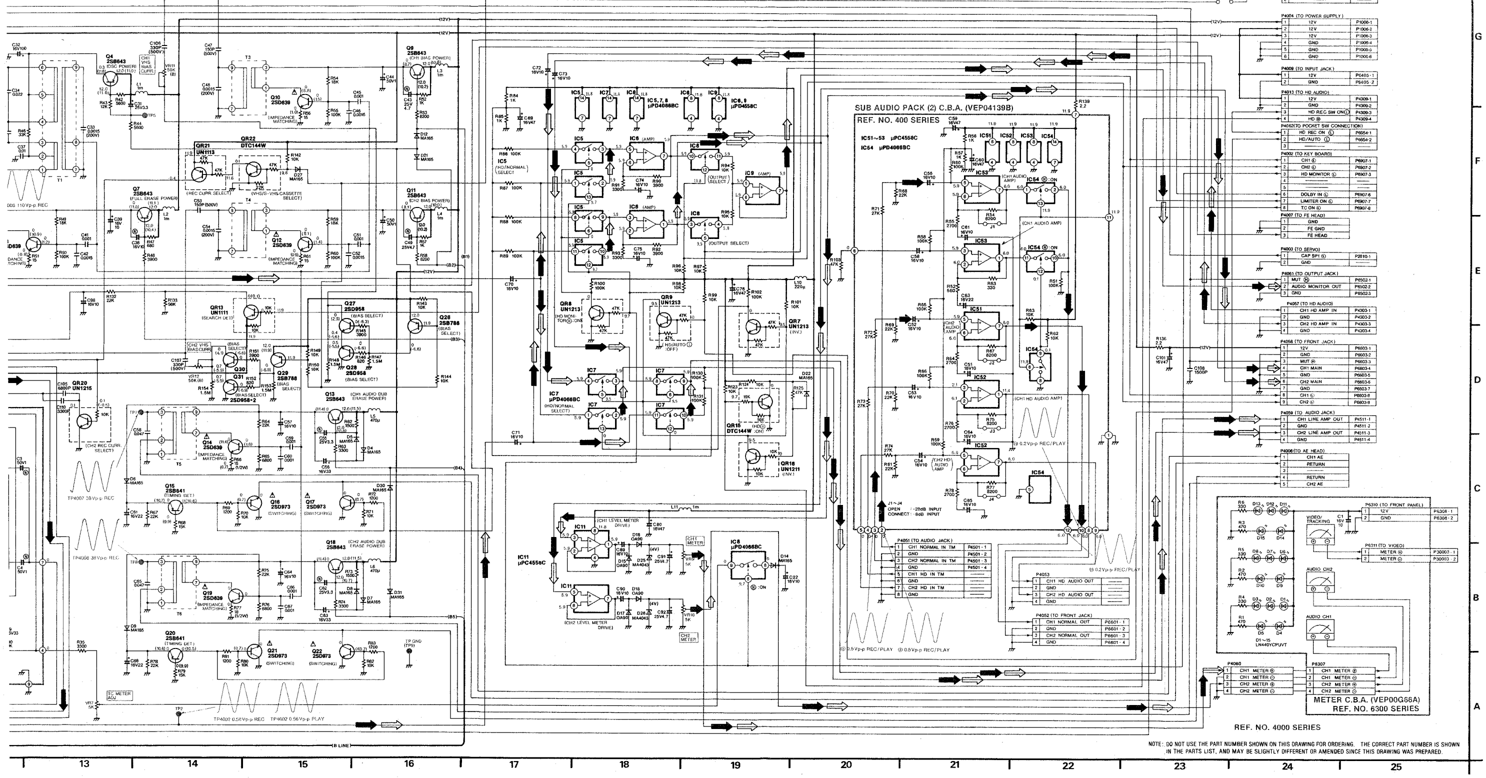
ↄK MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM ARE FOLLOWING CONDITION.

AUDIO IN SIGNAL LEVEL ..... −8dB, 1kHz
DOLBY SW.............. ON
LIMITER SW .... ON
AUDIO LEVEL VR......... CENTER POSITION

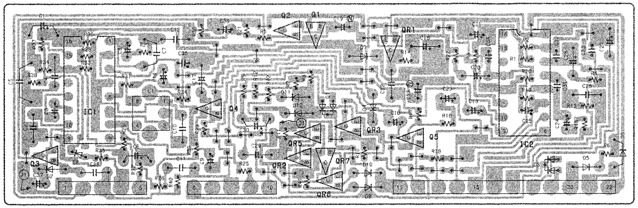
MEASUREMENT TAPE...... S-VHS CASSETTE TAPE
MEASUREMENT MODE
REC MODE .... BRACKET ( )
P.B MODE............ WITHOUT BRACKET
REC/P.B MODE .... WITHOUT BRACKET


SUB AUDIO PACK (2) C.B.A. (VEP04139B)
REF. NO. 400 SERIES
IC51~53 μPC4558C
IC54 μPD4066BC
METER C.B.A. (VEP00G66A)
REF. NO. 6300 SERIES
REF. NO. 4000 SERIES
IC5,7,8 μPD4066BC
IC6,9 μPD4558C
IC11 μPC4558C
D1~15 LN440YCPUVT
P4060
P6307
CH1 METER ⊕
CH1 METER ⊖
CH2 METER ⊕
CH2 METER ⊖
P4051 (TO AUDIO JACK)
P4053
P4052 (TO FRONT JACK)
P4063 (TO SUB VIDEO)
P4004 (TO POWER SUPPLY)
P4009 (TO INPUT JACK)
P4013 (TO HD AUDIO)
P4062(TO POCKET SW CONNECTION)
P4002 (TO KEY BOARD)
P4007 (TO FE HEAD)
P4003 (TO SERVO)
P4061 (TO OUTPUT JACK)
P4057 (TO HD AUDIO)
P4058 (TO FRONT JACK)
P4059 (TO AUDIO JACK)
P4006(TO AE HEAD)
P6310 (TO FRONT PANEL)
P6311 (TO VIDEO)
VIDEO/TRACKING
AUDIO CH2
AUDIO CH1
TC METER ADJ
(B LINE)
TP4007 38Vp-p REC
TP4008 38Vp-p REC
TP4002 0.56Vp-p REC TP4002 0.56Vp-p PLAY
0.2Vp-p REC/PLAY
0.5Vp-p REC/PLAY
J1~J4 OPEN : -20dB INPUT CONNECT : -8dB INPUT
A
B
C
D
E
F
G
13
14
15
16
17
18
19
20
21
22
23
24
25

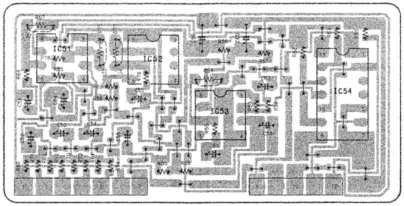
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NORMAL AUDIO C.B.A. (VEP04239B), SUB AUDIO PACK (1) C.B.A. (VEP04133B), SUB AUDIO PACK (2) C.B.A. (VEP04139B), TIME CODE PACK C.B.A. (VEP00G62A) & METER C.B.A. (VEP00G66A)

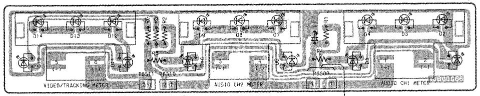
SUB AUDIO PACK (1) C.B.A. (VEP04133B) REF. No. 400 SERIES (FOIL SIDE)


IC1
IC2
QR1
QR2
QR3
QR5
QR6
QR7
Q1
Q2
Q3
Q4
Q5

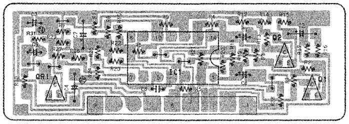
SUB AUDIO PACK (2) C.B.A. (VEP04139B) REF. No. 400 SERIES (FOIL SIDE)

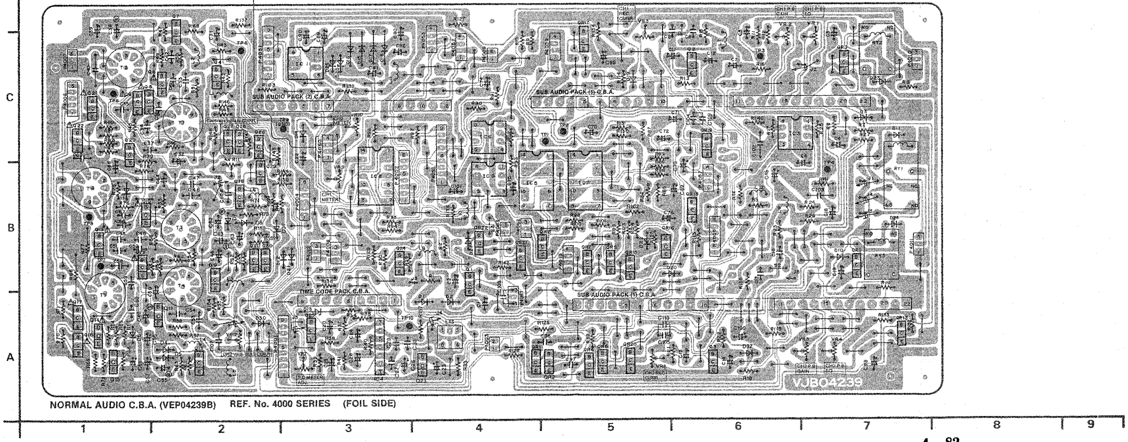

IC51
IC52
IC53
IC54

METER C.B.A. (VEP00G66A) REF. No. 6300 SERIES (FOIL SIDE)


VIDEO/TRACKING METER
AUDIO CH2 METER
AUDIO CH1 METER
VJB0G66

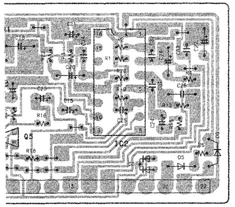
TIME CODE PACK C.B.A. (VEP00G62A) (FOIL SIDE)


IC1
QR1
Q1
Q2

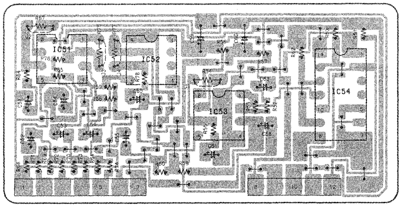

F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
SUB AUDIO PACK (2) C.B.A.
SUB AUDIO PACK (1) C.B.A.
TIME CODE PACK C.B.A.
CH1 METER
CH1 REC GAIN
CH1 P.B GAIN
CH2 P.B EQ
VJB04239

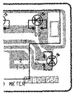
NORMAL AUDIO C.B.A. (VEP04239B) REF. No. 4000 SERIES (FOIL SIDE)

DIO PACK (1) C.B.A. (VEP04133B), SUB AUDIO PACK (2) C.B.A. (VEP04139B) , ETER C.B.A. (VEP00G66A)

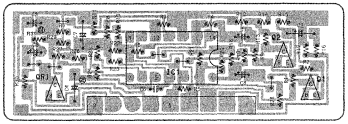


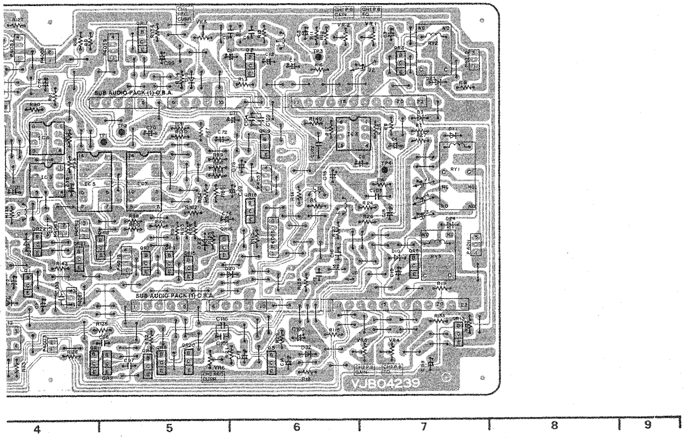
SUB AUDIO PACK (2) C.B.A. (VEP04139B) REF. No. 400 SERIES (FOIL SIDE)





TIME CODE PACK C.B.A. (VEP00G62A) (FOIL SIDE)





Sub Audio Pack (1) C.B.A.	
Transistor	
Q401	F-3
Q402	F-3
Q403	F-1
Q404	F-2
Q405	F-4
Transistor & Resistor	
QR401	F-4
QR402	F-3
QR403	F-3
QR405	F-3
QR406	E-3
QR407	F-3
Integrated Circuit	
IC401	F-1
IC402	F-5

ADDRESS INFORMATION

Sub Audio Pack (2) C.B.A.	
Integrated Circuit	
IC451	F-6
IC452	F-7
IC453	F-7
IC454	F-8

ADDRESS INFORMATION

Time Code Pack C.B.A.	
Transistor	
Q1	D-8
Q2	E-8
Transistor & Resistor	
QR1	D-6
Integrated Circuit	
IC1	D-7

ADDRESS INFORMATION

Meter C.B.A.	
Connector	
P6307	D-3
P6310	D-2
P6311	D-2

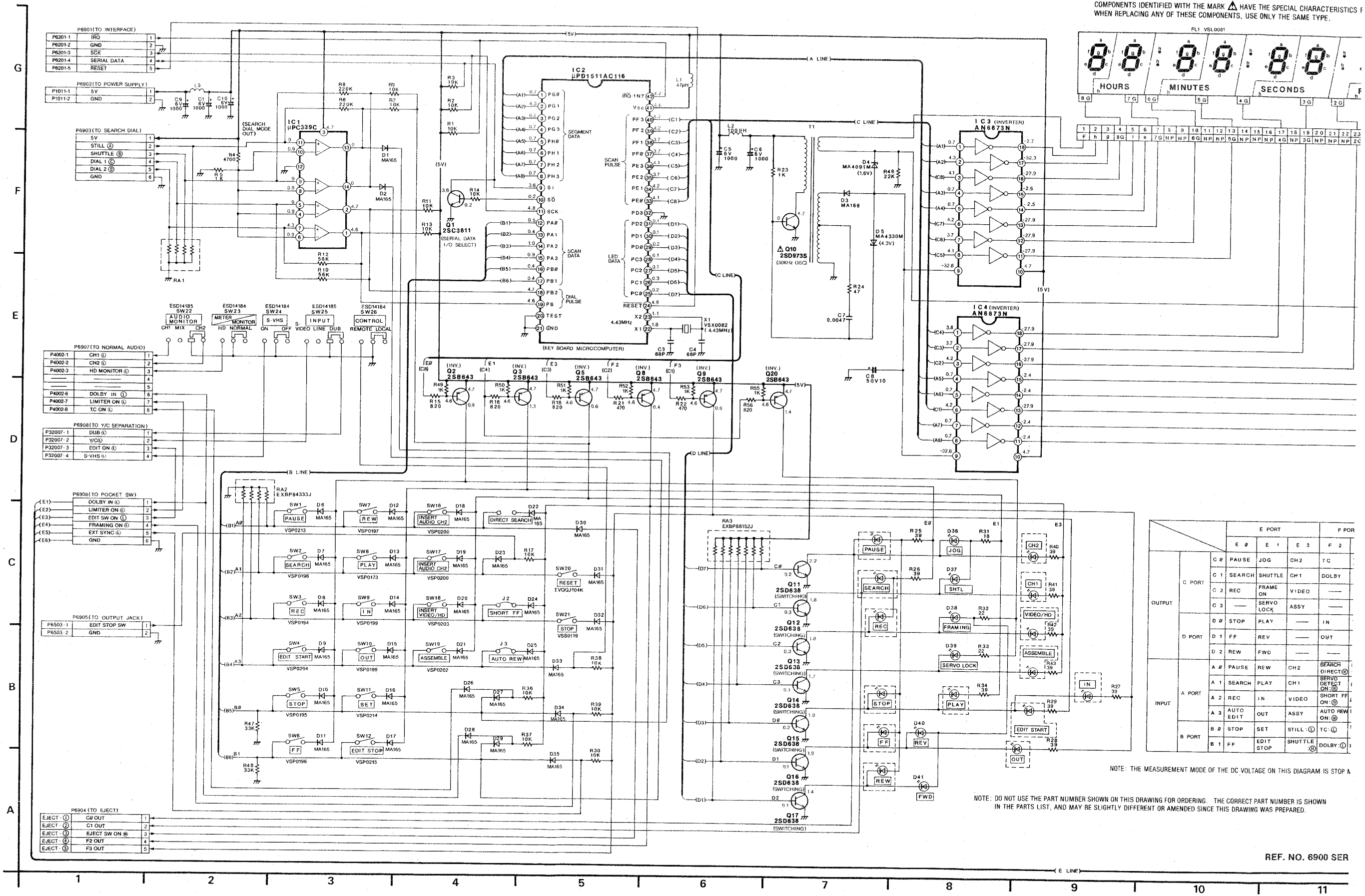
ADDRESS INFORMATION

Normal Audio C.B.A.	
Transistor	
Q4001	B-4
Q4002	C-6
Q4003	A-6
Q4004	C-2
Q4005	C-1
Q4006	C-1
Q4007	D-2
Q4008	C-2
Q4009	B-2
Q4010	B-1
Q4011	A-2
Q4012	B-1
Q4013	A-2
Q4014	A-1
Q4015	A-1
Q4016	A-1
Q4017	A-1
Q4018	B-2
Q4019	B-1
Q4020	C-1
Q4021	C-1
Q4022	C-1
Q4023	A-4
Q4024	B-3
Q4025	A-3
Q4026	C-2
Q4027	C-2
Q4028	C-2
Q4029	B-2
Q4030	B-2
Q4031	B-2
Transistor & Resistor	
QR4001	A-4
QR4002	A-5
QR4003	C-7
QR4004	A-5
QR4005	A-5
QR4006	B-7
QR4007	B-5
QR4008	B-5
QR4009	B-5
QR4013	A-7
QR4015	B-5
QR4016	B-5
QR4017	C-5
QR4018	B-6
QR4019	C-6
QR4020	A-5
QR4021	B-4
QR4022	B-4
Integrated Circuit	
IC4003	C-6
IC4004	A-3
IC4005	B-4
IC4006	C-4
IC4007	B-5
IC4008	B-3
IC4009	B-4
IC4011	C-3
Test Point	
TP4001	C-5
TP4002	C-5
TP4003	C-6
TP4004	B-7
TP4005	C-2
TP4006	C-1
TP4007	B-1
TP4008	B-1
TP4009 (GND)	C-3
TP4010	A-3
Adjustment	
VR4001	C-7
VR4002	C-6
VR4003	C-5
VR4004	A-7
VR4005	A-7
VR4006	A-5
VR4007	A-3
VR4009	B-3
VR4010	C-3
VR4011	B-2
VR4012	A-2
Connector	
P4001	A-3
P4002	B-3
P4003	A-4
P4004	B-3
P4005	B-6
P4006	C-1
P4007	C-1
P4008	B-3
P4009	C-4
P4010	C-7
P4011	B-7
P4012	B-3
P4013	B-5
P4051	C-2
P4052	C-4
P4053	C-4
P4057	B-6
P4058	B-4
P4059	C-5
P4060	C-3
P4061	A-4
P4062	B-4
P4063	B-4

ADDRESS INFORMATION

KEY BOARD SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS F
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.


FL1 VSL0081
HOURS
MINUTES
SECONDS
P6901(TO INTERFACE)
IRQ
GND
SCK
SERIAL DATA
RESET
P6902(TO POWER SUPPLY)
5V
GND
P6903(TO SEARCH DIAL)
STILL Ⓐ
SHUTTLE Ⓑ
DIAL 1 Ⓒ
DIAL 2 Ⓓ
IC1 μPC339C
(SEARCH DIAL MODE OUT)
IC2 μPD1511AC116
SEGMENT DATA
SCAN PULSE
LED DATA
DIAL PULSE
(KEY BOARD MICROCOMPUTER)
Q1 2SC3811 (SERIAL DATA I/O SELECT)
X1 VSX0082 (4.43MHz)
Q10 2SD973S (30KHz OSC)
IC3 (INVERTER) AN6873N
IC4 (INVERTER) AN6873N
ESD14185 SW22 AUDIO MONITOR CH1 MIX CH2
ESD14184 SW23 METER MONITOR HD NORMAL
ESD14184 SW24 S-VHS ON OFF
ESD14185 SW25 INPUT S-VIDEO LINE DUB
ESD14184 SW26 CONTROL REMOTE LOCAL
P6907(TO NORMAL AUDIO)
CH1 Ⓛ
CH2 Ⓛ
HD MONITOR Ⓛ
DOLBY IN Ⓛ
LIMITER ON Ⓛ
TC ON Ⓛ
P6908(TO Y/C SEPARATION)
DUB Ⓛ
Y/CⓁ
EDIT ON Ⓛ
S-VHS Ⓛ
P6906(TO POCKET SW)
DOLBY IN Ⓗ
LIMITER ON Ⓗ
EDIT SW ON Ⓛ
FRAMING ON Ⓛ
EXT SYNC Ⓛ
GND
P6905(TO OUTPUT JACK)
EDIT STOP SW
GND
P6904(TO EJECT)
C0 OUT
C1 OUT
EJECT SW ON Ⓗ
F2 OUT
F3 OUT
Q2 Q3 Q5 Q8 Q9 Q20 (INV.) 2SB643
RA2 EXBP84333J
RA3 EXBP68152J
PAUSE
REW
INSERT AUDIO CH2
DIRECT SEARCH
SEARCH
PLAY
RESET
REC
IN
INSERT VIDEO/HD
SHORT FF
STOP
EDIT START
OUT
ASSEMBLE
AUTO REW
SET
FF
EDIT STOP
Q11 Q12 Q13 Q14 Q15 Q16 Q17 2SD638 (SWITCHING)
JOG
SHTL
FRAMING
SERVO LOCK
CH2
CH1
VIDEO/HD
FWD
(A LINE)
(B LINE)
(C LINE)
(D LINE)
(E LINE)
(5V)
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11

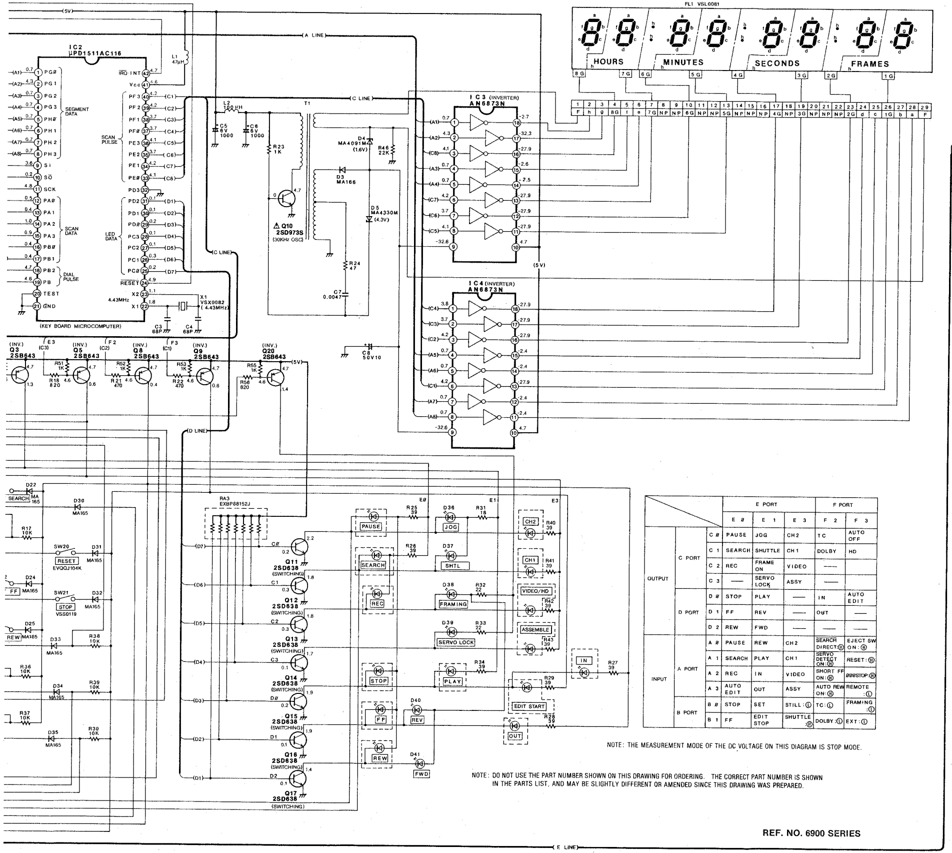
			E PORT			F POR
			E 0	E 1	E 3	F 2
OUTPUT	C PORT	C 0	PAUSE	JOG	CH2	TC
		C 1	SEARCH	SHUTTLE	CH1	DOLBY
		C 2	REC	FRAME ON	VIDEO	——
		C 3	——	SERVO LOCK	ASSY	——
	D PORT	D 0	STOP	PLAY	——	IN
		D 1	FF	REV	——	OUT
		D 2	REW	FWD	——	——
INPUT	A PORT	A 0	PAUSE	REW	CH2	SEARCH DIRECT:Ⓗ
		A 1	SEARCH	PLAY	CH1	SERVO DETECT ON:Ⓗ
		A 2	REC	IN	VIDEO	SHORT FF ON:Ⓗ
		A 3	AUTO EDIT	OUT	ASSY	AUTO REW ON:Ⓗ
	B PORT	B 0	STOP	SET	STILL:Ⓛ	TC:Ⓛ
		B 1	FF	EDIT STOP	SHUTTLE :Ⓗ	DOLBY:Ⓛ

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP M

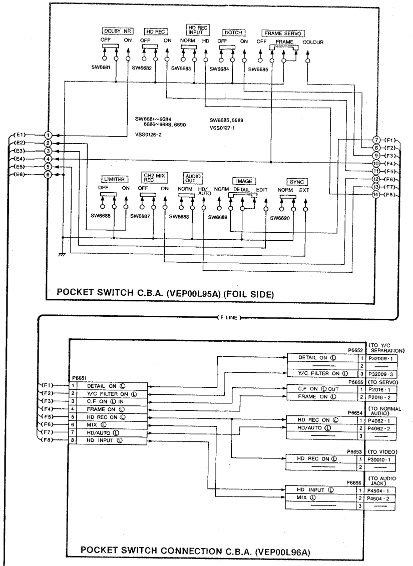
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF. NO. 6900 SER

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



IC2 μPD1511AC116
(KEY BOARD MICROCOMPUTER)
SEGMENT DATA
SCAN PULSE
SCAN DATA
LED DATA
DIAL PULSE
X1 VSX0082 (4.43MHz)
4.43MHz
L1 47μH
L2 100μH
T1
Q10 2SD973S (30KHz OSC)
D3 MA166
D4 MA4091M (1.6V)
D5 MA4330M (4.3V)
R23 1K
R24 47
R46 22K
C5 6V 1000
C6 6V 1000
C7 0.0047
C8 50V10
IC3 (INVERTER) AN6873N
IC4 (INVERTER) AN6873N
FL1 VSL0081
HOURS
MINUTES
SECONDS
FRAMES
(5V)
(A LINE)
(C LINE)
(D LINE)
(E LINE)
Q3 2SB643
Q5 2SB643
Q8 2SB643
Q9 2SB643
Q20 2SB643
Q11 2SD638 (SWITCHING)
Q12 2SD638 (SWITCHING)
Q13 2SD638 (SWITCHING)
Q14 2SD638 (SWITCHING)
Q15 2SD638 (SWITCHING)
Q16 2SD638 (SWITCHING)
Q17 2SD638 (SWITCHING)
RA3 EXBP88152J
SEARCH
RESET
EVQQJ104K
STOP
VSS0119
FF
REW
PAUSE
JOG
SHTL
REC
FRAMING
SERVO LOCK
PLAY
REV
FWD
CH2
CH1
VIDEO/HD
ASSEMBLE
IN
EDIT START
OUT



DOLBY NR
HD REC
HD REC INPUT
NOTCH
FRAME SERVO
OFF
ON
NORM
HD
FRAME
COLOUR
SW6681
SW6682
SW6683
SW6684
SW6685
SW6681~6684 6686~6688, 6690 VSS0126-2
SW6685, 6689 VSS0127-1
LIMITER
CH2 MIX REC
AUDIO OUT
IMAGE
SYNC
HD/AUTO
DETAIL
EDIT
EXT
SW6686
SW6687
SW6688
SW6689
SW6690
POCKET SWITCH C.B.A. (VEP00L95A) (FOIL SIDE)
(F LINE)
P6651
DETAIL ON Ⓛ
Y/C FILTER ON Ⓛ
C.F ON Ⓛ IN
FRAME ON Ⓛ
HD REC ON Ⓛ
MIX Ⓛ
HD/AUTO Ⓛ
HD INPUT Ⓛ
P6652 (TO Y/C SEPARATION)
P32009-1
P32009-3
P6655 (TO SERVO)
C.F ON Ⓛ OUT
P2016-1
P2016-2
P6654 (TO NORMAL AUDIO)
P4062-1
P4062-2
P6653 (TO VIDEO)
P30010-1
P6656 (TO AUDIO JACK)
P4504-1
P4504-2
POCKET SWITCH CONNECTION C.B.A. (VEP00L96A)

			E PORT			F PORT	
			E Ø	E 1	E 3	F 2	F 3
OUTPUT	C PORT	C Ø	PAUSE	JOG	CH2	TC	AUTO OFF
		C 1	SEARCH	SHUTTLE	CH1	DOLBY	HD
		C 2	REC	FRAME ON	VIDEO	——	
		C 3	——	SERVO LOCK	ASSY	——	
	D PORT	D Ø	STOP	PLAY	——	IN	AUTO EDIT
		D 1	FF	REV	——	OUT	——
		D 2	REW	FWD	——	——	——
INPUT	A PORT	A Ø	PAUSE	REW	CH2	SEARCH DIRECT:Ⓗ	EJECT SW ON:Ⓗ
		A 1	SEARCH	PLAY	CH1	SERVO DETECT ON:Ⓗ	RESET:Ⓗ
		A 2	REC	IN	VIDEO	SHORT FF ON:Ⓗ	ØØØSTOP:Ⓗ
		A 3	AUTO EDIT	OUT	ASSY	AUTO REW ON:Ⓗ	REMOTE :Ⓛ
	B PORT	B Ø	STOP	SET	STILL:Ⓛ	TC:Ⓛ	FRAMING :Ⓛ
		B 1	FF	EDIT STOP	SHUTTLE :Ⓗ	DOLBY:Ⓛ	EXT:Ⓛ

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

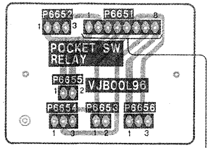
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF. NO. 6900 SERIES

5 6 7 8 9 10 11 12 13 14 15

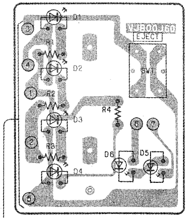
KEY BOARD C.B.A. (VEP06322D)

POCKET SWITCH CONNECTION C.B.A. (VEP00L96A)


P6652
P6651
POCKET SW RELAY
P6655
VJB00L96
P6654
P6653
P6656

(FOIL SIDE)

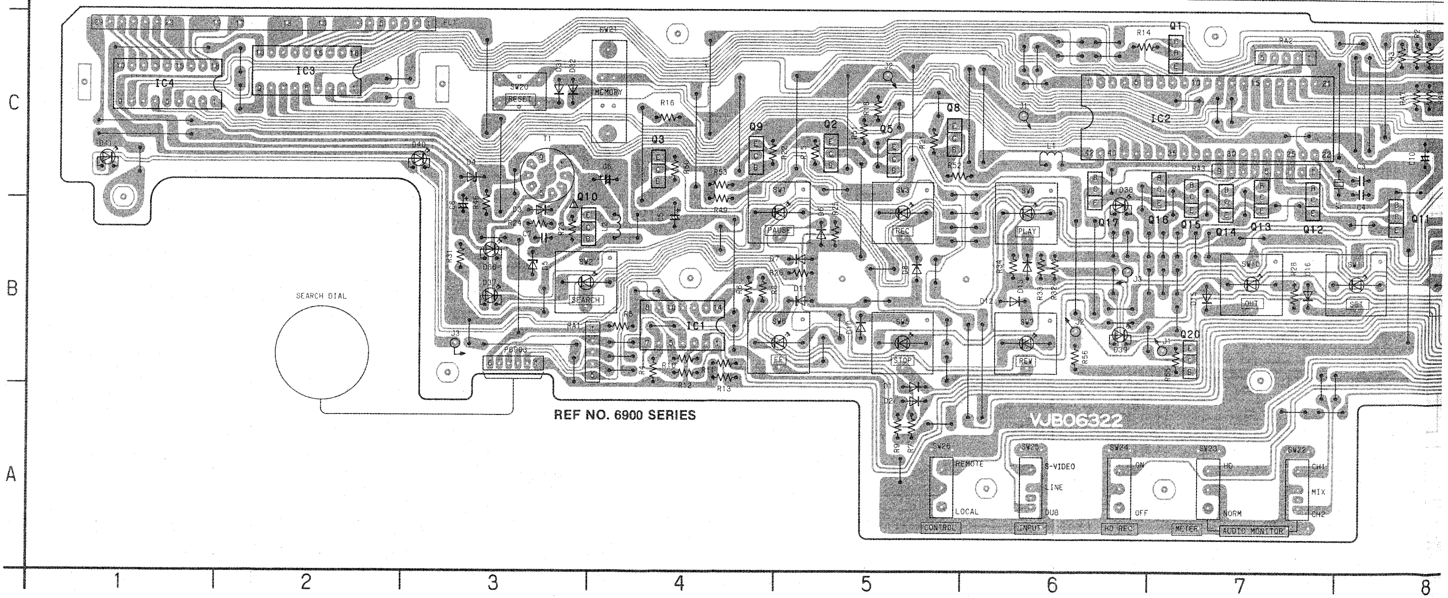
EJECT C.B.A. (VEP00J60A)


VJB00J60
EJECT
SW1
D1
D2
D3
D4
D5
D6
R1
R2
R3
R4

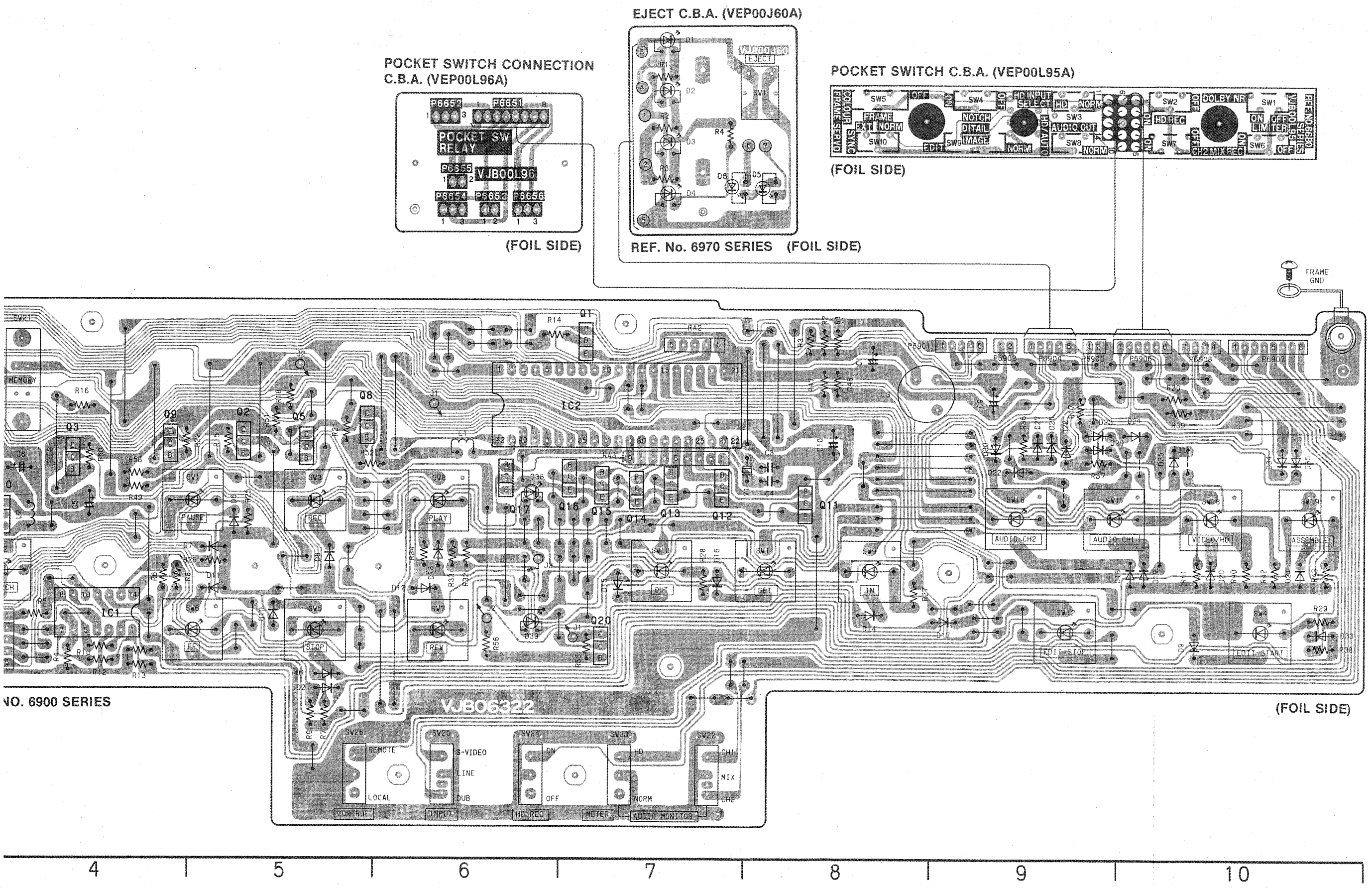
REF. No. 6970 SERIES (FOIL SIDE)

POC
COLOUR
FRAME SERVO
SYNC
(FO

KEY BOARD C.B.A. (VEP06322D)


E
D
C
B
A
1
2
3
4
5
6
7
8
IC4
IC3
IC2
IC1
SW21
MEMORY
SW20
RESET
T1
Q10
Q3
Q9
Q2
Q5
Q8
Q1
Q17
Q16
Q15
Q14
Q13
Q12
Q11
Q20
SEARCH DIAL
SEARCH
PAUSE
REC
PLAY
FF
STOP
REW
OUT
SET
P6903
VJB06322
REMOTE
LOCAL
CONTROL
S-VIDEO
LINE
DUB
INPUT
ON
OFF
HD REC
HD
NORM
METER
CH1
MIX
CH2
AUDIO MONITOR

REF NO. 6900 SERIES


POCKET SWITCH CONNECTION C.B.A. (VEP00L96A)
P6652
P6651
POCKET SW RELAY
P6655
VJB00L96
P6654
P6653
P6656
(FOIL SIDE)
EJECT C.B.A. (VEP00J60A)
VJB00J60
EJECT
D1
D2
D3
D4
D5
D6
R1
R2
R3
R4
SW1
REF. No. 6970 SERIES
(FOIL SIDE)
POCKET SWITCH C.B.A. (VEP00L95A)
COLOUR
FRAME SERVO
SYNC
FRAME
EXT
NORM
EDIT
NOTCH
DITAIL
IMAGE
HD INPUT SELECT
HD
HD/AUTO
AUDIO OUT
DOLBY NR
HD REC
LIMITER
CH2 MIX REC
ON
OFF
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
(FOIL SIDE)
FRAME GND
MEMORY
IC1
IC2
Q1
Q2
Q3
Q5
Q8
Q9
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q20
RA2
L3
P6901
P6902
P6903
P6904
P6905
P6906
P6907
P6908
PAUSE
REC
PLAY
FF
STOP
REW
OUT
SET
IN
AUDIO CH2
AUDIO CH1
VIDEO/HD
ASSEMBLE
EDIT STOP
EDIT START
VJB06322
REMOTE
LOCAL
CONTROL
S-VIDEO
LINE
DUB
INPUT
ON
OFF
HD REC
HD
NORM
METER
AUDIO MONITOR
CH1
MIX
CH2
NO. 6900 SERIES
(FOIL SIDE)
4
5
6
7
8
9
10

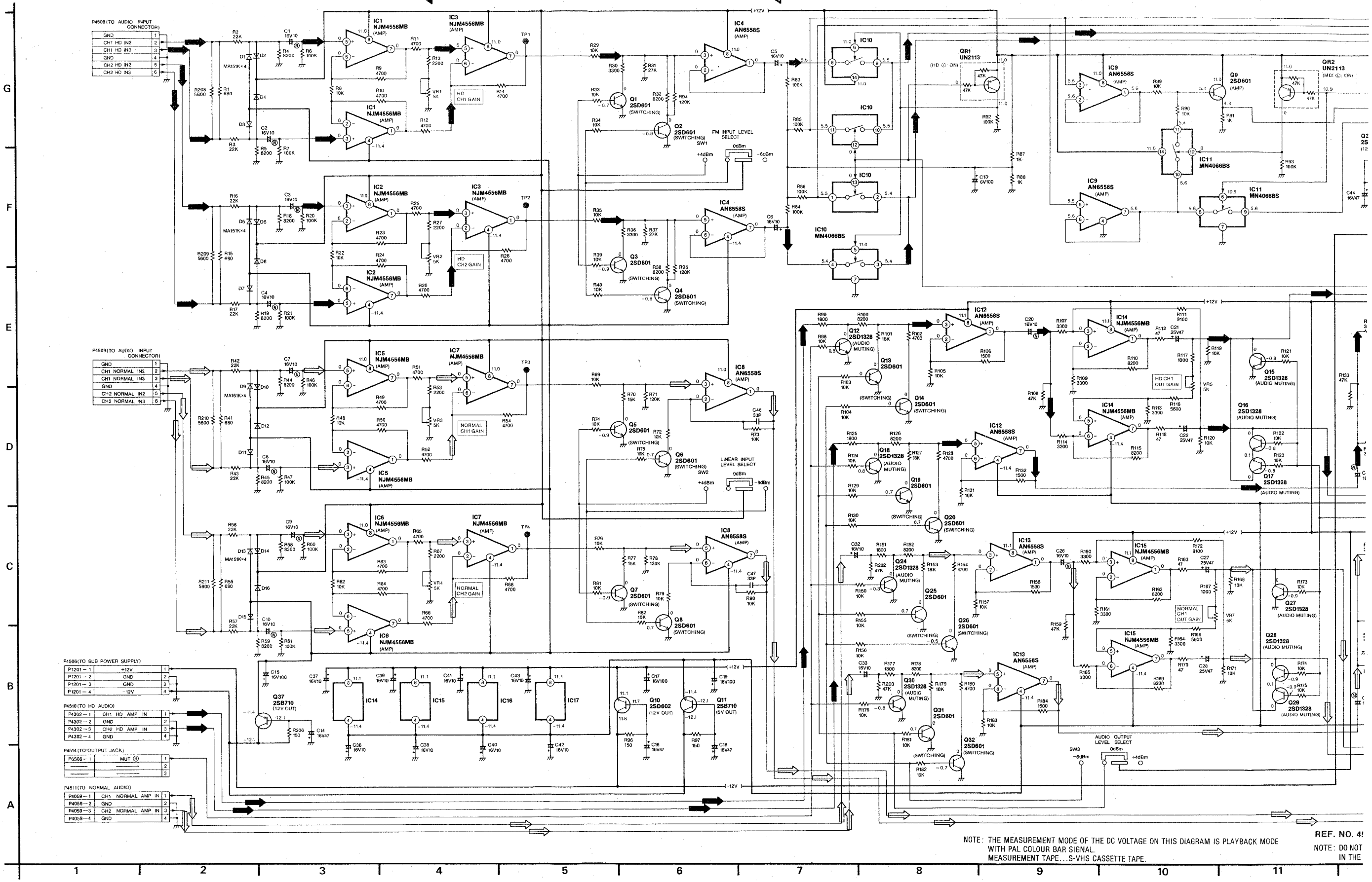
Key Board C.B.A.	
Transistor	
Q6901	C-7
Q6902	C-5
Q6903	C-4
Q6905	C-5
Q6908	C-5
Q6909	C-4
Q6910	B-4
Q6911	B-8
Q6912	B-7
Q6913	B-7
Q6914	B-7
Q6915	B-7
Q6916	C-7
Q6917	C-6
Q6920	B-7
Integrated Circuit	
IC6901	B-4
IC6902	C-7
IC6903	C-2
IC6904	C-1
Connector	
P6901	C-9
P6902	C-9
P6903	B-3
P6904	C-9
P6905	C-9
P6906	C-10
P6907	C-10
P6908	C-10

ADDRESS INFORMATION

AUDIO JACK SCHEMATIC DIAGRAM

HD AUDIO SIGNAL PATH.

NORMAL AUDIO SIGNAL PATH.

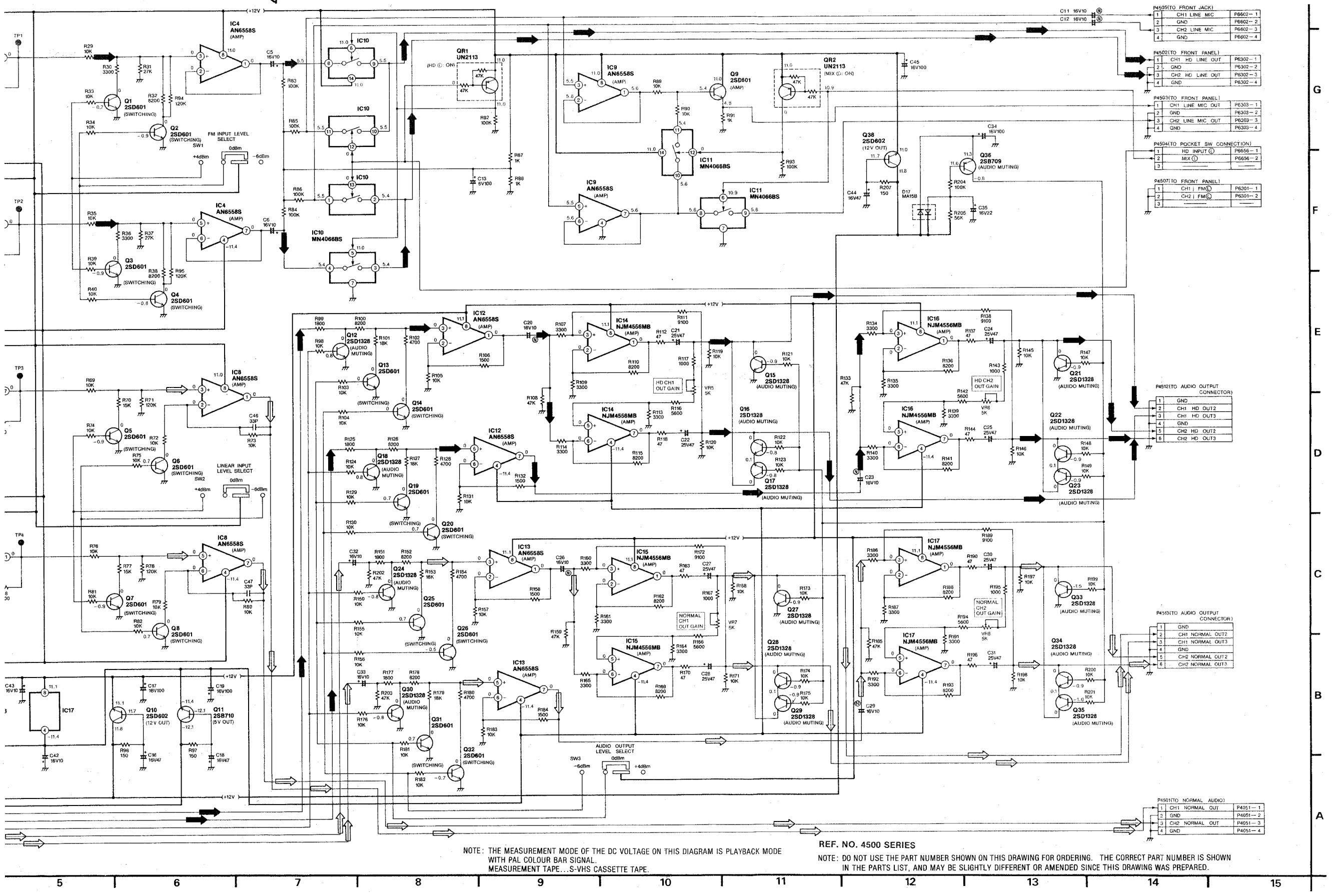

P4508 (TO AUDIO INPUT CONNECTOR)
GND
CH1 HD IN2
CH1 HD IN3
GND
CH2 HD IN2
CH2 HD IN3
P4509 (TO AUDIO INPUT CONNECTOR)
GND
CH1 NORMAL IN2
CH1 NORMAL IN3
GND
CH2 NORMAL IN2
CH2 NORMAL IN3
P4506 (TO SUB POWER SUPPLY)
P1201-1 +12V
P1201-2 GND
P1201-3 GND
P1201-4 -12V
P4510 (TO HD AUDIO)
P4302-1 CH1 HD AMP IN
P4302-2 GND
P4302-3 CH2 HD AMP IN
P4302-4 GND
P4514 (TO OUTPUT JACK)
P6508-1 MUT
P4511 (TO NORMAL AUDIO)
P4059-1 CH1 NORMAL AMP IN
P4059-2 GND
P4059-3 CH2 NORMAL AMP IN
P4059-4 GND
IC1 NJM4556MB (AMP)
IC2 NJM4556MB (AMP)
IC3 NJM4556MB (AMP)
IC4 AN6558S (AMP)
IC5 NJM4556MB (AMP)
IC6 NJM4556MB (AMP)
IC7 NJM4556MB (AMP)
IC8 AN6558S (AMP)
IC9 AN6556S (AMP)
IC10 MN4066BS
IC11 MN4066BS
IC12 AN6558S (AMP)
IC13 AN6558S (AMP)
IC14 NJM4556MB (AMP)
IC15 NJM4556MB (AMP)
IC14
IC15
IC16
IC17
QR1 UN2113 (HD ON)
QR2 UN2113 (MIX ON)
Q1 2SD601 (SWITCHING)
Q2 2SD601 (SWITCHING)
Q3 2SD601 (SWITCHING)
Q4 2SD601 (SWITCHING)
Q5 2SD601 (SWITCHING)
Q6 2SD601 (SWITCHING)
Q7 2SD601 (SWITCHING)
Q8 2SD601 (SWITCHING)
Q9 2SD601 (AMP)
Q10 2SB602 (12V OUT)
Q11 2SB710 (5V OUT)
Q12 2SD1328 (AUDIO MUTING)
Q13 2SD601 (SWITCHING)
Q14 2SD601 (SWITCHING)
Q15 2SD1328 (AUDIO MUTING)
Q16 2SD1328 (AUDIO MUTING)
Q17 2SD1328 (AUDIO MUTING)
Q18 2SD1328 (AUDIO MUTING)
Q19 2SD601
Q20 2SD601 (SWITCHING)
Q24 2SD1328 (AUDIO MUTING)
Q25 2SD601
Q26 2SD601 (SWITCHING)
Q27 2SD1328 (AUDIO MUTING)
Q28 2SD1328 (AUDIO MUTING)
Q29 2SD1328 (AUDIO MUTING)
Q30 2SD1328 (AUDIO MUTING)
Q31 2SD601
Q32 2SD601 (SWITCHING)
Q37 2SB710 (12V OUT)
MA151K×4
HD CH1 GAIN
HD CH2 GAIN
NORMAL CH1 GAIN
NORMAL CH2 GAIN
HD CH1 OUT GAIN
NORMAL CH1 OUT GAIN
FM INPUT LEVEL SELECT SW1
LINEAR INPUT LEVEL SELECT SW2
AUDIO OUTPUT LEVEL SELECT SW3
+4dBm
0dBm
-6dBm
-8dBm
TP1
TP2
TP3
TP4
+12V
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE
WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

REF. NO. 4

NOTE: DO NOT
IN THE

AUDIO SIGNAL PATH. ⇦ NORMAL AUDIO SIGNAL PATH.

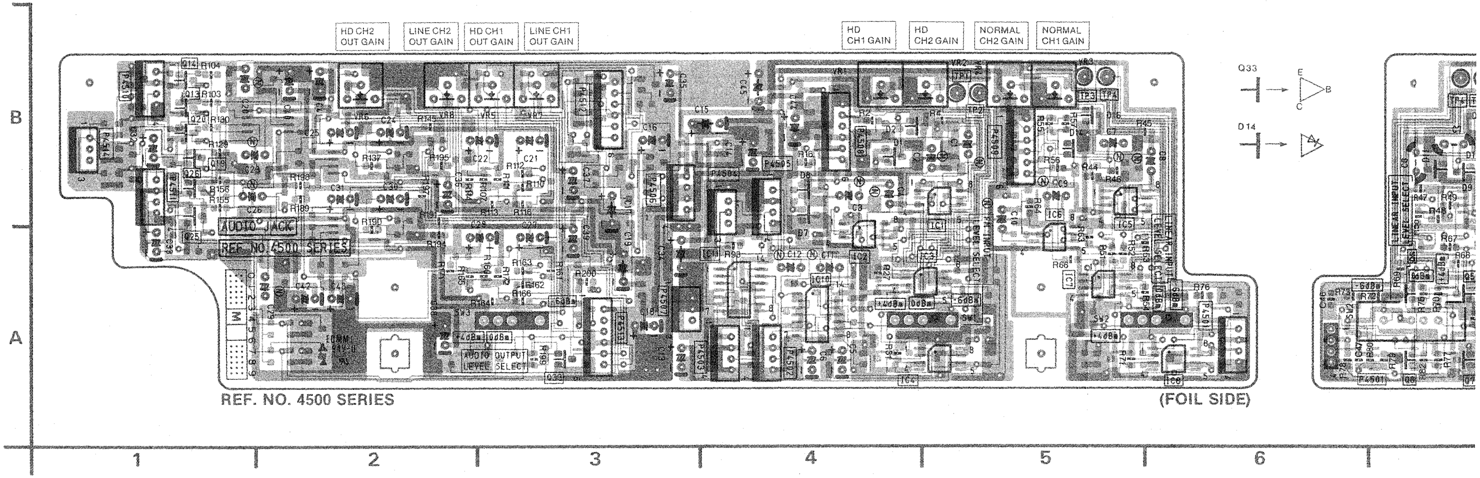

TP1
TP2
TP3
TP4
IC4 AN6558S (AMP)
IC8 AN6558S (AMP)
IC9 AN6558S (AMP)
IC10 MN4066BS
IC11 MN4066BS
IC12 AN6558S (AMP)
IC13 AN6558S (AMP)
IC14 NJM4556MB (AMP)
IC15 NJM4556MB (AMP)
IC16 NJM4556MB (AMP)
IC17 NJM4556MB (AMP)
IC17
QR1 UN2113 (HD ① ON)
QR2 UN2113 (MIX ①: ON)
Q1 2SD601 (SWITCHING)
Q2 2SD601 (SWITCHING)
Q3 2SD601 (SWITCHING)
Q4 2SD601 (SWITCHING)
Q5 2SD601 (SWITCHING)
Q6 2SD601 (SWITCHING)
Q7 2SD601 (SWITCHING)
Q8 2SD601 (SWITCHING)
Q9 2SD601 (AMP)
Q10 2SD602 (12V OUT)
Q11 2SB710 (5V OUT)
Q12 2SD1328 (AUDIO MUTING)
Q13 2SD601 (SWITCHING)
Q14 2SD601 (SWITCHING)
Q15 2SD1328 (AUDIO MUTING)
Q16 2SD1328 (AUDIO MUTING)
Q17 2SD1328 (AUDIO MUTING)
Q18 2SD1328 (AUDIO MUTING)
Q19 2SD601 (SWITCHING)
Q20 2SD601 (SWITCHING)
Q21 2SD1328 (AUDIO MUTING)
Q22 2SD1328 (AUDIO MUTING)
Q23 2SD1328 (AUDIO MUTING)
Q24 2SD1328 (AUDIO MUTING)
Q25 2SD601
Q26 2SD601 (SWITCHING)
Q27 2SD1328 (AUDIO MUTING)
Q28 2SD1328 (AUDIO MUTING)
Q29 2SD1328 (AUDIO MUTING)
Q30 2SD1328 (AUDIO MUTING)
Q31 2SD601 (SWITCHING)
Q32 2SD601 (SWITCHING)
Q33 2SD1328 (AUDIO MUTING)
Q34 2SD1328 (AUDIO MUTING)
Q35 2SD1328 (AUDIO MUTING)
Q36 2SB709 (AUDIO MUTING)
Q38 2SD602 (12V OUT)
D17 MA158
FM INPUT LEVEL SELECT SW1 +4dBm 0dBm -6dBm
LINEAR INPUT LEVEL SELECT SW2 +4dBm 0dBm -6dBm
AUDIO OUTPUT LEVEL SELECT SW3 -6dBm 0dBm +4dBm
HD CH1 OUT GAIN VR5 5K
HD CH2 OUT GAIN VR6 5K
NORMAL CH1 OUT GAIN VR7 5K
NORMAL CH2 OUT GAIN VR8 5K
(+12V)
C11 16V10
C12 16V10
P4505 (TO FRONT JACK)
1 CH1 LINE MIC P6602-1
2 GND P6602-2
3 CH2 LINE MIC P6602-3
4 GND P6602-4
P4502 (TO FRONT PANEL)
1 CH1 HD LINE OUT P6302-1
2 GND P6302-2
3 CH2 HD LINE OUT P6302-3
4 GND P6302-4
P4503 (TO FRONT PANEL)
1 CH1 LINE MIC OUT P6303-1
2 GND P6303-2
3 CH2 LINE MIC OUT P6303-3
4 GND P6303-4
P4504 (TO POCKET SW CONNECTION)
1 HD INPUT Ⓛ P6656-1
2 MIX Ⓛ P6656-2
3
P4507 (TO FRONT PANEL)
1 CH1 FMⓁ P6301-1
2 CH2 FMⓁ P6301-2
3
P4512 (TO AUDIO OUTPUT CONNECTOR)
1 GND
2 CH1 HD OUT2
3 CH1 HD OUT3
4 GND
5 CH2 HD OUT2
6 CH2 HD OUT3
P4513 (TO AUDIO OUTPUT CONNECTOR)
1 GND
2 CH1 NORMAL OUT2
3 CH1 NORMAL OUT3
4 GND
5 CH2 NORMAL OUT2
6 CH2 NORMAL OUT3
P4501 (TO NORMAL AUDIO)
1 CH1 NORMAL OUT P4051-1
2 GND P4051-2
3 CH2 NORMAL OUT P4051-3
4 GND P4051-4
G
F
E
D
C
B
A
5
6
7
8
9
10
11
12
13
14
15

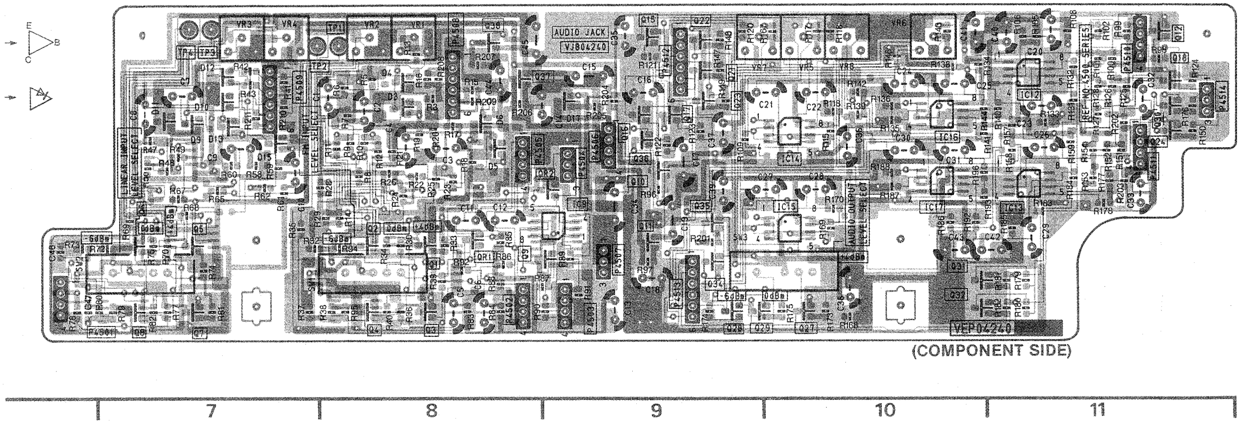
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

REF. NO. 4500 SERIES

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

AUDIO JACK C.B.A. (VEP04240A)


HD CH2 OUT GAIN
LINE CH2 OUT GAIN
HD CH1 OUT GAIN
LINE CH1 OUT GAIN
HD CH1 GAIN
HD CH2 GAIN
NORMAL CH2 GAIN
NORMAL CH1 GAIN
Q33
E
B
C
D14
AUDIO JACK
REF. NO. 4500 SERIES
AUDIO OUTPUT LEVEL SELECT
+4dBm
0dBm
-6dBm
LEVEL SELECT
LINEAR INPUT LEVEL SELECT
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
TP1
TP2
TP3
TP4
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC10
IC11
SW1
SW2
SW3
P4501
P4503
P4505
P4506
P4510
P4511
P4512
P4514
REF. NO. 4500 SERIES
(FOIL SIDE)
B
A
1
2
3
4
5
6


E
B
C
AUDIO JACK
VJB04240
LINEAR INPUT LEVEL SELECT
AUDIO OUTPUT LEVEL SELECT
REF NO. 4500 SERIES
VEP04240
7
8
9
10
11

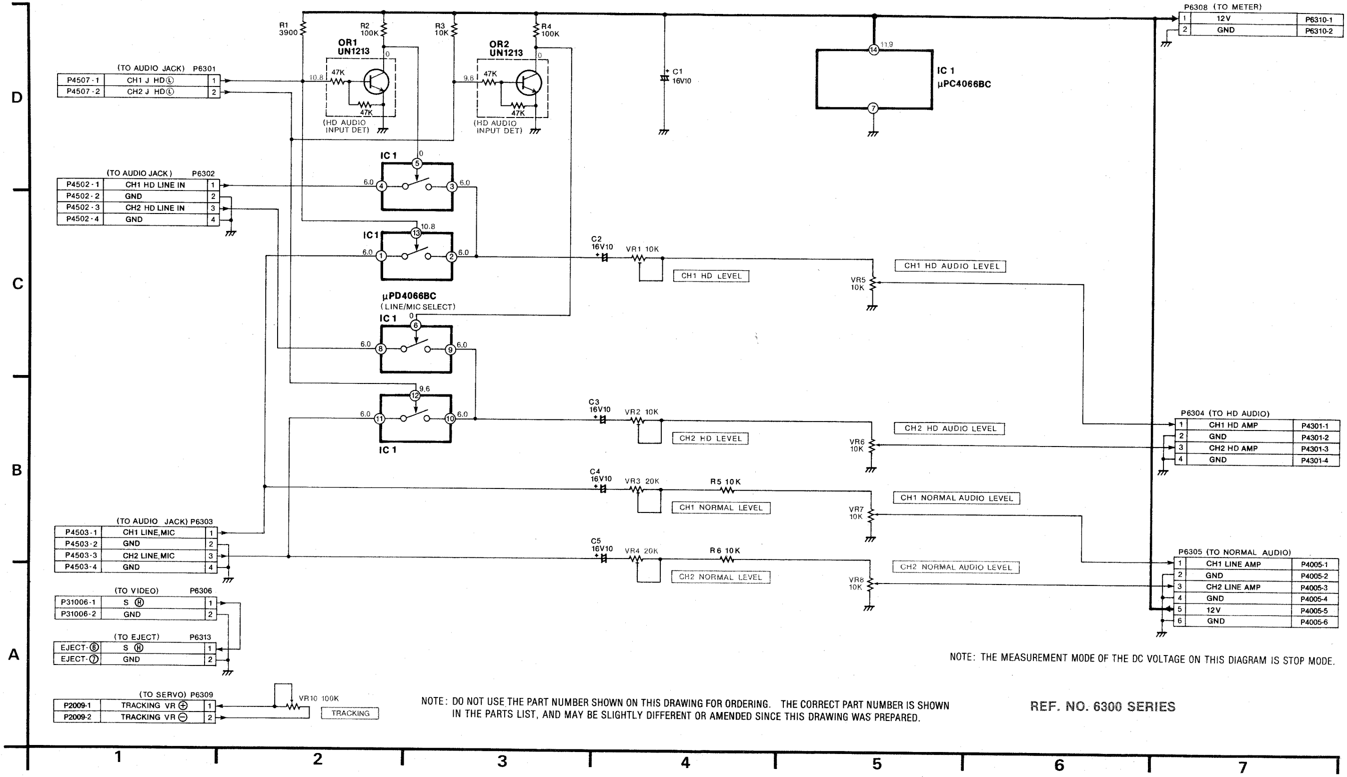
(COMPONENT SIDE)

Audio Jack C.B.A.		
Transistor		
Q4501	A-8	Ⓒ
Q4502	A-8	Ⓒ
Q4503	A-8	Ⓒ
Q4504	A-8	Ⓒ
Q4505	A-7	Ⓒ
Q4506	A-7	Ⓒ
Q4507	A-7	Ⓒ
Q4508	A-7	Ⓒ
Q4509	A-8	Ⓒ
Q4510	A-9	Ⓒ
Q4511	A-9	Ⓒ
Q4512	B-11	Ⓒ
Q4513	B-1	Ⓕ
Q4514	B-1	Ⓕ
Q4515	B-9	Ⓒ
Q4516	A-9	Ⓒ
Q4517	B-9	Ⓒ
Q4518	B-11	Ⓒ
Q4519	B-1	Ⓕ
Q4520	B-1	Ⓕ
Q4521	B-9	Ⓒ
Q4522	B-9	Ⓒ
Q4523	B-9	Ⓒ
Q4524	B-11	Ⓒ
Q4525	A-1	Ⓕ
Q4526	B-1	Ⓕ
Q4527	A-10	Ⓒ
Q4528	A-9	Ⓒ
Q4529	A-10	Ⓒ
Q4530	B-11	Ⓒ
Q4531	A-10	Ⓒ
Q4532	A-10	Ⓒ
Q4533	A-3	Ⓕ
Q4534	A-9	Ⓒ
Q4535	A-9	Ⓒ
Q4536	A-9	Ⓒ
Q4537	B-8	Ⓒ
Q4538	B-8	Ⓒ
Transistor & Resistor		
QR4501	A-8	Ⓒ
QR4502	A-9	Ⓒ
Integrated Circuit		
IC4501	B-5	Ⓕ
IC4502	A-4	Ⓕ
IC4503	A-5	Ⓕ
IC4504	A-5	Ⓕ
IC4505	A-5	Ⓕ
IC4506	A-5	Ⓕ
IC4507	A-5	Ⓕ
IC4508	A-6	Ⓕ
IC4509	A-9	Ⓒ
IC4510	A-4	Ⓕ
IC4511	A-4	Ⓕ
IC4512	B-11	Ⓒ
IC4513	A-11	Ⓒ
IC4514	B-10	Ⓒ
IC4515	A-10	Ⓒ
IC4516	B-10	Ⓒ
IC4517	A-10	Ⓒ
Test Point		
TP4501	B-5	Ⓕ
TP4502	B-5	Ⓕ
TP4503	B-5	Ⓕ
TP4504	B-5	Ⓕ
Adjustment		
VR4501	B-4	Ⓕ
VR4502	B-5	Ⓕ
VR4503	B-5	Ⓕ
VR4504	B-5	Ⓕ
VR4505	B-3	Ⓕ
VR4506	B-3	Ⓕ
VR4507	B-3	Ⓕ
VR4508	B-2	Ⓕ
Connector		
P4501	A-6	Ⓕ
P4502	A-4	Ⓕ
P4503	A-4	Ⓕ
P4504	B-4	Ⓕ
P4505	B-4	Ⓕ
P4506	B-3	Ⓕ
P4507	A-3	Ⓕ
P4508	B-4	Ⓕ
P4509	B-5	Ⓕ
P4510	B-1	Ⓕ
P4511	B-1	Ⓕ
P4512	B-3	Ⓕ
P4513	B-3	Ⓕ
P4514	B-1	Ⓕ

ADDRESS INFORMATION
Ⓒ ··· COMPONENT SIDE
Ⓕ ··· FOIL SIDE

FRONT PANEL
FRONT JACK
AUDIO JACK C.B.A.

FRONT PANEL SCHEMATIC DIAGRAM


D
C
B
A
1
2
3
4
5
6
7
(TO AUDIO JACK) P6301
P4507-1 CH1 J HD Ⓛ 1
P4507-2 CH2 J HD Ⓛ 2
(TO AUDIO JACK) P6302
P4502-1 CH1 HD LINE IN 1
P4502-2 GND 2
P4502-3 CH2 HD LINE IN 3
P4502-4 GND 4
(TO AUDIO JACK) P6303
P4503-1 CH1 LINE,MIC 1
P4503-2 GND 2
P4503-3 CH2 LINE,MIC 3
P4503-4 GND 4
(TO VIDEO) P6306
P31006-1 S Ⓗ 1
P31006-2 GND 2
(TO EJECT) P6313
EJECT-⑧ S Ⓗ 1
EJECT-⑦ GND 2
(TO SERVO) P6309
P2009-1 TRACKING VR ⊕ 1
P2009-2 TRACKING VR ⊖ 2
VR10 100K
TRACKING
R1 3900
R2 100K
R3 10K
R4 100K
OR1 UN1213
OR2 UN1213
47K
47K
10.8
9.6
0
(HD AUDIO INPUT DET)
(HD AUDIO INPUT DET)
C1 16V10
IC 1 μPC4066BC
11.9
IC 1
μPD4066BC
(LINE/MIC SELECT)
6.0
10.8
9.6
C2 16V10
VR1 10K
CH1 HD LEVEL
C3 16V10
VR2 10K
CH2 HD LEVEL
C4 16V10
VR3 20K
R5 10K
CH1 NORMAL LEVEL
C5 16V10
VR4 20K
R6 10K
CH2 NORMAL LEVEL
VR5 10K
CH1 HD AUDIO LEVEL
VR6 10K
CH2 HD AUDIO LEVEL
VR7 10K
CH1 NORMAL AUDIO LEVEL
VR8 10K
CH2 NORMAL AUDIO LEVEL
P6308 (TO METER)
1 12V P6310-1
2 GND P6310-2
P6304 (TO HD AUDIO)
1 CH1 HD AMP P4301-1
2 GND P4301-2
3 CH2 HD AMP P4301-3
4 GND P4301-4
P6305 (TO NORMAL AUDIO)
1 CH1 LINE AMP P4005-1
2 GND P4005-2
3 CH2 LINE AMP P4005-3
4 GND P4005-4
5 12V P4005-5
6 GND P4005-6

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

REF. NO. 6300 SERIES

6310-1
6310-2

4301-1
4301-2
4301-3
4301-4

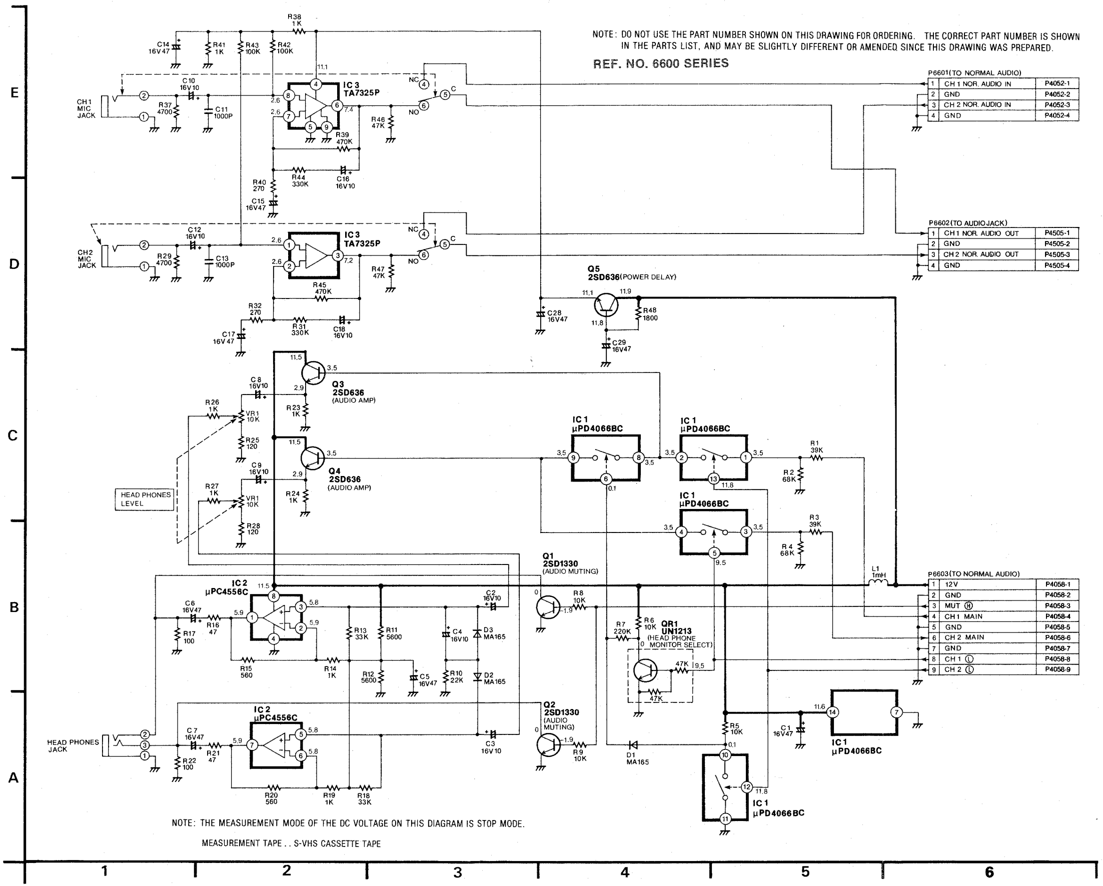
4005-1
4005-2
4005-3
4005-4
4005-5
4005-6

MODE.

FRONT JACK SCHEMATIC DIAGRAM

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

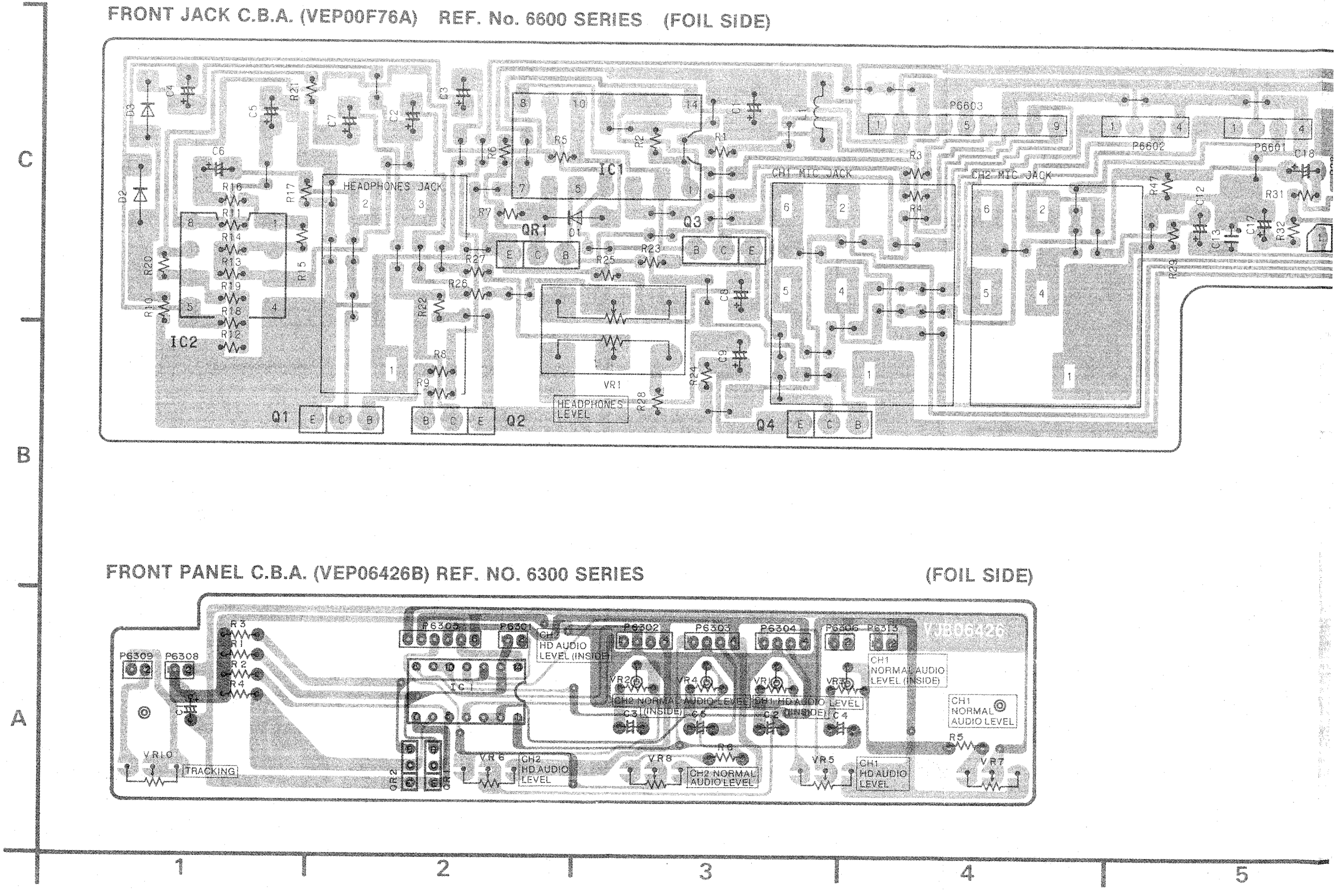
REF. NO. 6600 SERIES


E
D
C
B
A
1
2
3
4
5
6
R38 1K
C14 16V47
R41 1K
R43 100K
R42 100K
CH1 MIC JACK
C10 16V10
R37 4700
C11 1000P
IC3 TA7325P
R46 47K
R39 470K
R44 330K
C16 16V10
R40 270
C15 16V47
NC
NO
C
CH2 MIC JACK
C12 16V10
R29 4700
C13 1000P
IC3 TA7325P
R47 47K
R45 470K
R32 270
R31 330K
C18 16V10
C17 16V47
Q5 2SD636(POWER DELAY)
C28 16V47
R48 1800
C29 16V47
Q3 2SD636 (AUDIO AMP)
C8 16V10
R26 1K
VR1 10K
R25 120
R23 1K
Q4 2SD636 (AUDIO AMP)
C9 16V10
R27 1K
R28 120
R24 1K
HEAD PHONES LEVEL
IC1 µPD4066BC
R1 39K
R2 68K
R3 39K
R4 68K
L1 1mH
Q1 2SD1330 (AUDIO MUTING)
R8 10K
IC2 µPC4556C
C6 16V47
R16 47
R17 100
R15 560
R14 1K
R13 33K
R11 5600
R12 5600
C5 16V47
C4 16V10
R10 22K
D3 MA165
D2 MA165
C2 16V10
R7 220K
R6 10K
QR1 UN1213 (HEAD PHONE MONITOR SELECT)
47K
Q2 2SD1330 (AUDIO MUTING)
HEAD PHONES JACK
C7 16V47
R21 47
R22 100
R20 560
R19 1K
R18 33K
C3 16V10
R9 10K
D1 MA165
R5 10K
C1 16V47
P6601(TO NORMAL AUDIO)
1 CH 1 NOR. AUDIO IN P4052-1
2 GND P4052-2
3 CH 2 NOR. AUDIO IN P4052-3
4 GND P4052-4
P6602(TO AUDIO JACK)
1 CH1 NOR. AUDIO OUT P4505-1
2 GND P4505-2
3 CH2 NOR. AUDIO OUT P4505-3
4 GND P4505-4
P6603(TO NORMAL AUDIO)
1 12V P4058-1
2 GND P4058-2
3 MUT Ⓗ P4058-3
4 CH1 MAIN P4058-4
5 GND P4058-5
6 CH 2 MAIN P4058-6
7 GND P4058-7
8 CH 1 Ⓛ P4058-8
9 CH 2 Ⓛ P4058-9

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

MEASUREMENT TAPE . . S-VHS CASSETTE TAPE

FRONT PANEL C.B.A. (VEP06426B) & FRONT JACK C.B.A. (VEP00F76A)



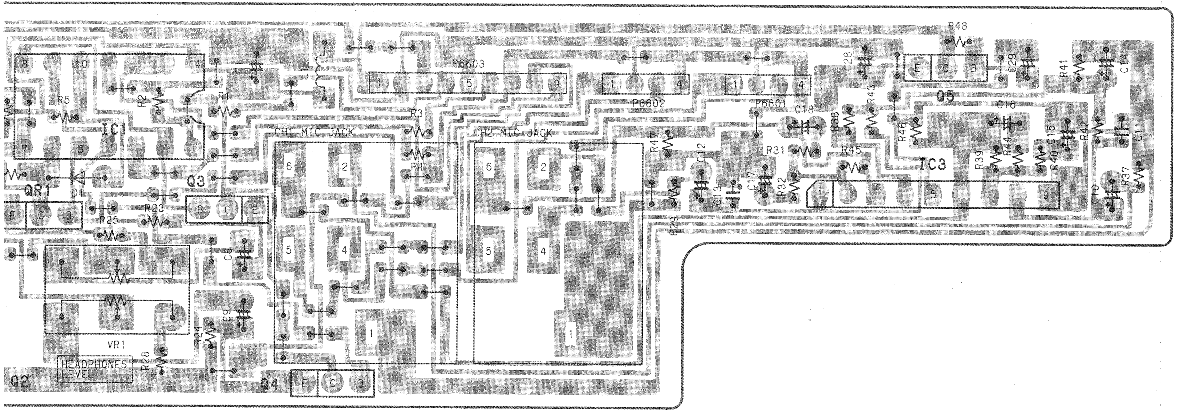
FRONT JACK C.B.A. (VEP00F76A) REF. No. 6600 SERIES (FOIL SIDE)

FRONT PANEL C.B.A. (VEP06426B) REF. NO. 6300 SERIES (FOIL SIDE)

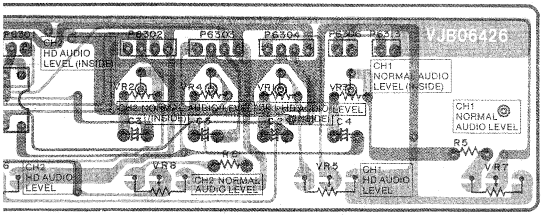
C
B
A
1
2
3
4
5
D3
D2
C4
C5
C7
C2
C3
C6
R21
R16
R11
R14
R13
R19
R18
R12
R20
R10
R15
R17
IC2
HEADPHONES JACK
R27
R26
R22
R8
R9
Q1
Q2
E
C
B
IC1
R5
R6
R7
R2
R1
QR1
D1
Q3
R23
R25
C1
C8
C9
R24
R28
VR1
HEADPHONES LEVEL
Q4
L1
P6603
P6602
P6601
R3
R4
CH1 MIC JACK
CH2 MIC JACK
R47
C12
C13
C17
C18
R31
R32
R29
P6309
P6308
C1
VR10
TRACKING
P6305
P6301
CH2 HD AUDIO LEVEL (INSIDE)
IC
QR2
QR1
VR6
CH2 HD AUDIO LEVEL
P6302
P6303
P6304
VR2
VR4
VR1
CH2 NORMAL AUDIO LEVEL (INSIDE)
CH1 HD AUDIO LEVEL (INSIDE)
C3
C5
C2
C4
R6
VR8
CH2 NORMAL AUDIO LEVEL
P6306
P6313
VJB06426
CH1 NORMAL AUDIO LEVEL (INSIDE)
VR3
LEVEL
CH1 NORMAL AUDIO LEVEL
R5
VR5
CH1 HD AUDIO LEVEL
VR7

ACK C.B.A. (VEP00F76A)

o. 6600 SERIES (FOIL SIDE)


8
10
14
R5
R2
R1
IC1
7
5
1
C1
L1
P6603
1
5
9
P6602
1
4
P6601
1
4
R48
C28
E
C
B
C29
R41
C14
Q5
R43
C16
R38
R46
C18
R3
CH1 MIC JACK
CH2 MIC JACK
R4
R47
C12
R31
R45
IC3
R39
R44
C15
R40
R42
C11
R37
C10
C13
C17
R32
R29
1
5
9
QR1
D1
Q3
B
C
E
E
C
B
R23
R25
C8
C9
R24
R28
VR1
HEADPHONES LEVEL
Q2
Q4
E
C
B
6
2
5
4
1
6
2
5
4
1

O. 6300 SERIES (FOIL SIDE)

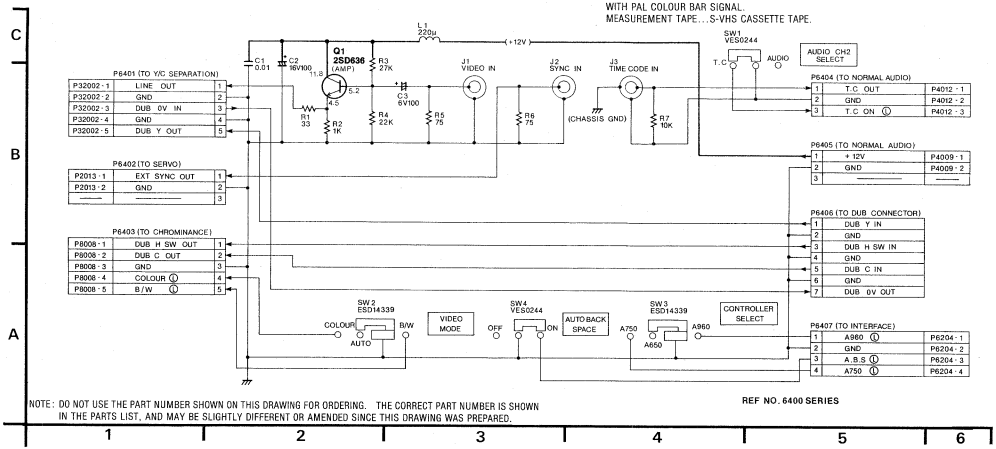

P6301
CH2 HD AUDIO LEVEL (INSIDE)
P6302
P6303
P6304
P6306
P6313
VJB05426
CH1 NORMAL AUDIO LEVEL (INSIDE)
VR2
VR4
VR1
VR3
CH2 NORMAL AUDIO LEVEL (INSIDE)
CH1 HD AUDIO LEVEL (INSIDE)
CH1 NORMAL AUDIO LEVEL
C3
C5
C2
C4
R5
R6
VR8
VR5
VR7
CH2 HD AUDIO LEVEL
CH2 NORMAL AUDIO LEVEL
CH1 HD AUDIO LEVEL

3 4 5 6

Front Jack, Front Panel C.B.A.	
Transistor	
Q6601	B-2
Q6602	B-2
Q6603	C-3
Q6604	B-3
Q6605	C-6
Transistor & Resistor	
QR6301	A-2
QR6302	A-2
QR6601	C-2
Integrated Circuit	
IC6301	A-2
IC6601	C-3
IC6602	C-1
IC6603	C-6
Adjustment	
VR6301	A-3
VR6302	A-3
VR6303	A-4
VR6304	A-3
VR6305	A-3
VR6306	A-2
VR6307	A-4
VR6308	A-3
VR6310	A-1
VR6601	B-3
Connector	
P6301	A-2
P6302	A-3
P6303	A-3
P6304	A-3
P6305	A-2
P6306	A-4
P6308	A-1
P6309	A-1
P6313	A-4
P6601	C-5
P6602	C-5
P6603	C-4

ADDRESS INFORMATION

INPUT JACK SCHEMATIC DIAGRAM

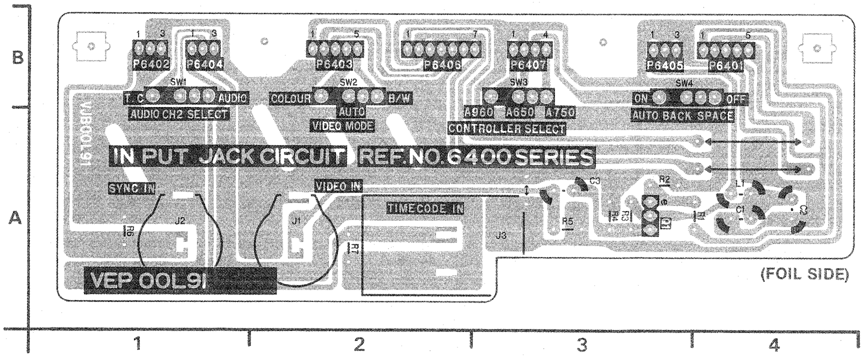

C
B
A
1
2
3
4
5
6
L1
220µ
(+12V)
C1
0.01
C2
16V100
Q1
2SD636
(AMP)
11.8
5.2
4.5
R3
27K
R1
33
R2
1K
R4
22K
C3
6V100
R5
75
J1
VIDEO IN
R6
75
J2
SYNC IN
J3
TIME CODE IN
(CHASSIS GND)
R7
10K
SW1
VES0244
T.C
AUDIO
AUDIO CH2
SELECT
P6401 (TO Y/C SEPARATION)
P32002 - 1 | LINE OUT | 1
P32002 - 2 | GND | 2
P32002 - 3 | DUB 0V IN | 3
P32002 - 4 | GND | 4
P32002 - 5 | DUB Y OUT | 5
P6402 (TO SERVO)
P2013 - 1 | EXT SYNC OUT | 1
P2013 - 2 | GND | 2
3
P6403 (TO CHROMINANCE)
P8008 - 1 | DUB H SW OUT | 1
P8008 - 2 | DUB C OUT | 2
P8008 - 3 | GND | 3
P8008 - 4 | COLOUR Ⓛ | 4
P8008 - 5 | B/W Ⓛ | 5
P6404 (TO NORMAL AUDIO)
1 | T.C OUT | P4012 - 1
2 | GND | P4012 - 2
3 | T.C ON Ⓛ | P4012 - 3
P6405 (TO NORMAL AUDIO)
1 | + 12V | P4009 - 1
2 | GND | P4009 - 2
3
P6406 (TO DUB CONNECTOR)
1 | DUB Y IN
2 | GND
3 | DUB H SW IN
4 | GND
5 | DUB C IN
6 | GND
7 | DUB 0V OUT
P6407 (TO INTERFACE)
1 | A960 Ⓛ | P6204 - 1
2 | GND | P6204 - 2
3 | A.B.S Ⓛ | P6204 - 3
4 | A750 Ⓛ | P6204 - 4
SW2
ESD14339
COLOUR
AUTO
B/W
VIDEO
MODE
SW4
VES0244
OFF
ON
AUTO BACK
SPACE
SW3
ESD14339
A750
A650
A960
CONTROLLER
SELECT

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE…S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

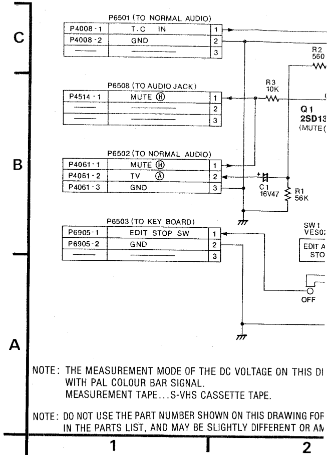
REF NO. 6400 SERIES

INPUT JACK C.B.A. (VEP00L91A)


B
A
1
2
3
4
P6402
P6404
P6403
P6406
P6407
P6405
P6401
SW1
T.C
AUDIO
AUDIO CH2 SELECT
SW2
COLOUR
B/W
AUTO
VIDEO MODE
SW3
A960
A650
A750
CONTROLLER SELECT
SW4
ON
OFF
AUTO BACK SPACE
IN PUT JACK CIRCUIT REF.NO.6400SERIES
VJB00L91
SYNC IN
VIDEO IN
TIMECODE IN
J1
J2
J3
R6
R7
R5
R4
R3
R2
R1
C1
C2
C3
L1
VEP 00L91

(FOIL SIDE)

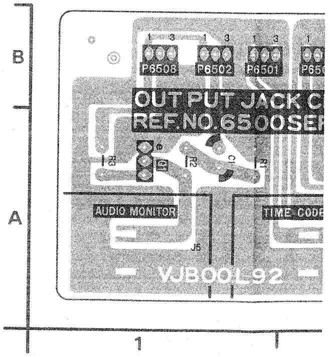
OUTPUT JACK SCHEMATIC DI


C
B
A
1
2
P6501 (TO NORMAL AUDIO)
P4008 - 1 | T.C IN | 1
P4008 - 2 | GND | 2
3
P6508 (TO AUDIO JACK)
P4514 - 1 | MUTE Ⓗ | 1
2
3
P6502 (TO NORMAL AUDIO)
P4061 - 1 | MUTE Ⓗ | 1
P4061 - 2 | TV Ⓐ | 2
P4061 - 3 | GND | 3
P6503 (TO KEY BOARD)
P6905 - 1 | EDIT STOP SW | 1
P6905 - 2 | GND | 2
3
R2
560
R3
10K
Q1
2SD13
(MUTE
C1
16V47
R1
56K
SW1
VES0
EDIT A
STO
OFF

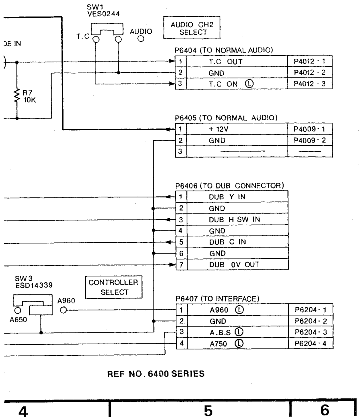
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DI
WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE…S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR
IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AM

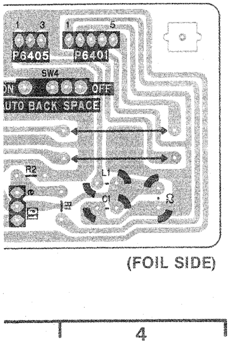
OUTPUT JACK C.B.A. (VEP00L


B
A
1
P6508
P6502
P6501
OUT PUT JACK C
REF.NO.6500SEF
R3
R2
C1
R1
AUDIO MONITOR
TIME CODE
J5
VJB00L92

\SUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE
.L COLOUR BAR SIGNAL.
:EMENT TAPE...S-VHS CASSETTE TAPE.

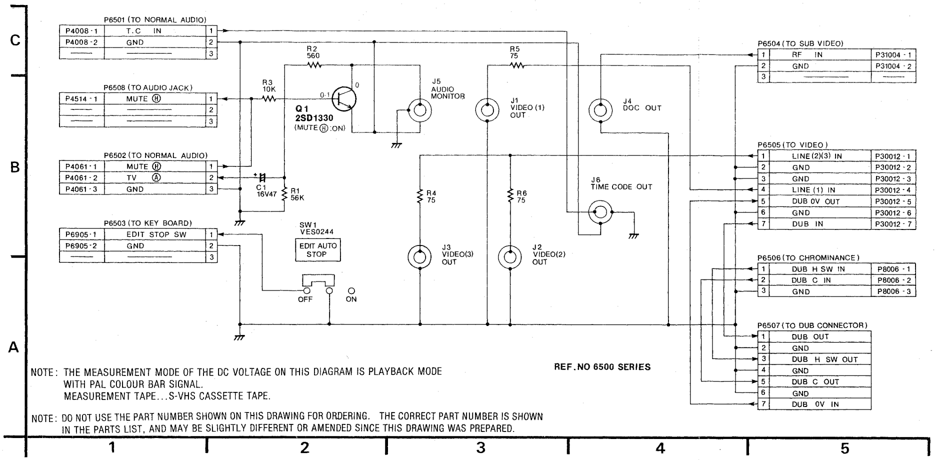

SW1
VES0244
T.C
AUDIO
AUDIO CH2 SELECT
ɔE IN
R7
10K
P6404 (TO NORMAL AUDIO)
1 T.C OUT P4012·1
2 GND P4012·2
3 T.C ON Ⓛ P4012·3
P6405 (TO NORMAL AUDIO)
1 +12V P4009·1
2 GND P4009·2
3
P6406 (TO DUB CONNECTOR)
1 DUB Y IN
2 GND
3 DUB H SW IN
4 GND
5 DUB C IN
6 GND
7 DUB 0V OUT
SW3
ESD14339
CONTROLLER SELECT
A960
A650
P6407 (TO INTERFACE)
1 A960 Ⓛ P6204·1
2 GND P6204·2
3 A.B.S Ⓛ P6204·3
4 A750 Ⓛ P6204·4
4
5
6

REF NO. 6400 SERIES


1 3
1 5
P6405
P6401
SW4
ON
OFF
AUTO BACK SPACE
R2
L1
C1
C2
R1
4

(FOIL SIDE)

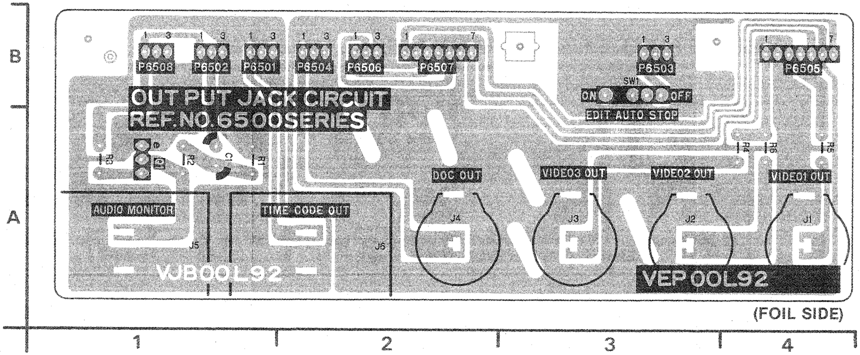
OUTPUT JACK SCHEMATIC DIAGRAM


C
B
A
P6501 (TO NORMAL AUDIO)
P4008·1 T.C IN 1
P4008·2 GND 2
3
P6508 (TO AUDIO JACK)
P4514·1 MUTE Ⓗ 1
2
3
P6502 (TO NORMAL AUDIO)
P4061·1 MUTE Ⓗ 1
P4061·2 TV Ⓐ 2
P4061·3 GND 3
P6503 (TO KEY BOARD)
P6905·1 EDIT STOP SW 1
P6905·2 GND 2
3
R2
560
R3
10K
Q1
2SD1330
(MUTE Ⓗ:ON)
C1
16V47
R1
56K
SW1
VES0244
EDIT AUTO STOP
OFF
ON
J5
AUDIO MONITOR
R5
75
J1
VIDEO (1) OUT
J4
DOC OUT
J6
TIME CODE OUT
R4
75
R6
75
J3
VIDEO(3) OUT
J2
VIDEO(2) OUT
P6504 (TO SUB VIDEO)
1 RF IN P31004·1
2 GND P31004·2
3
P6505 (TO VIDEO)
1 LINE (2)(3) IN P30012·1
2 GND P30012·2
3 GND P30012·3
4 LINE (1) IN P30012·4
5 DUB 0V OUT P30012·5
6 GND P30012·6
7 DUB IN P30012·7
P6506 (TO CHROMINANCE)
1 DUB H SW IN P8006·1
2 DUB C IN P8006·2
3 GND P8006·3
P6507 (TO DUB CONNECTOR)
1 DUB OUT
2 GND
3 DUB H SW OUT
4 GND
5 DUB C OUT
6 GND
7 DUB 0V IN
REF.NO 6500 SERIES
1
2
3
4
5

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR BAR SIGNAL.
MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

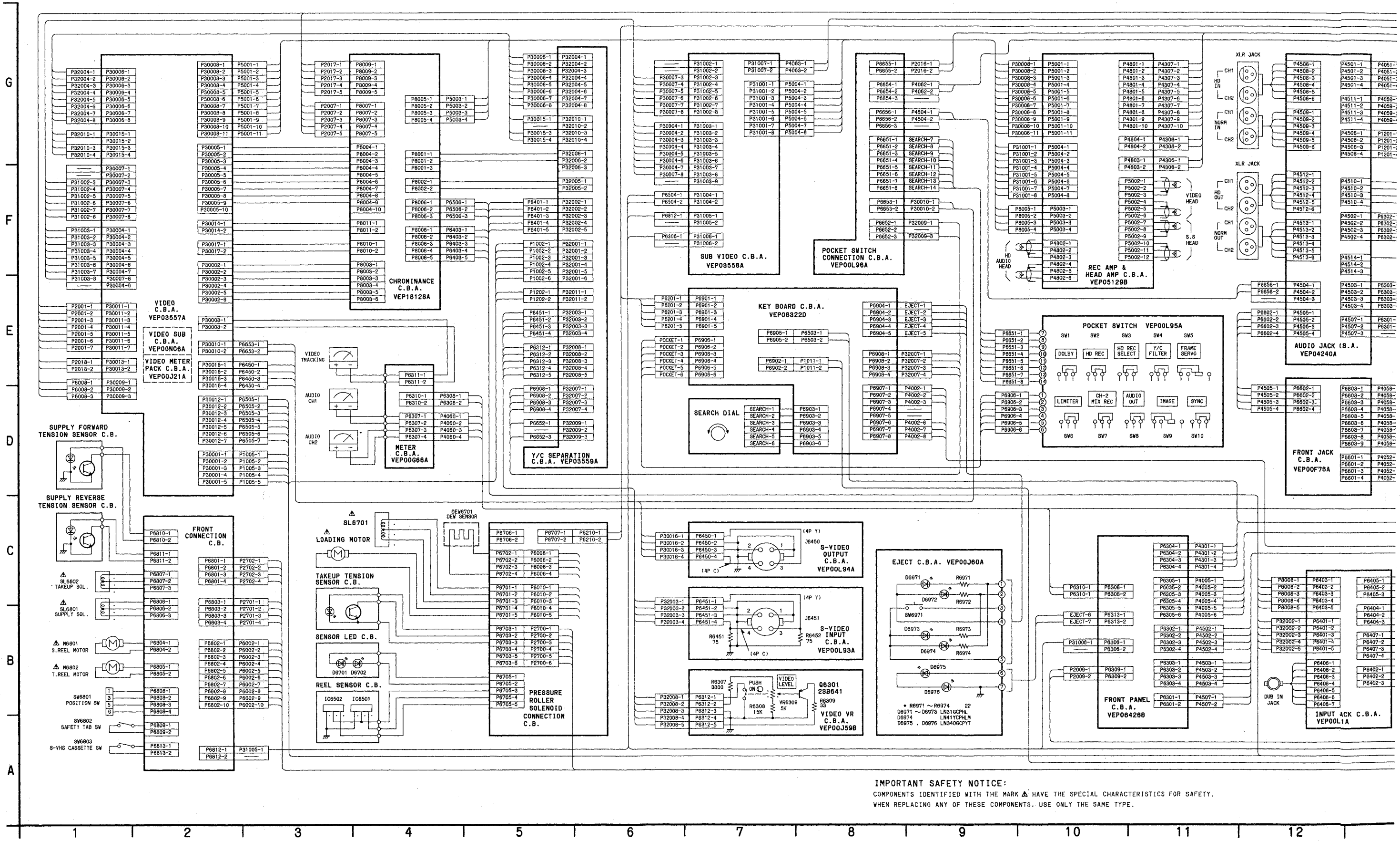
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

OUTPUT JACK C.B.A. (VEP00L92A)

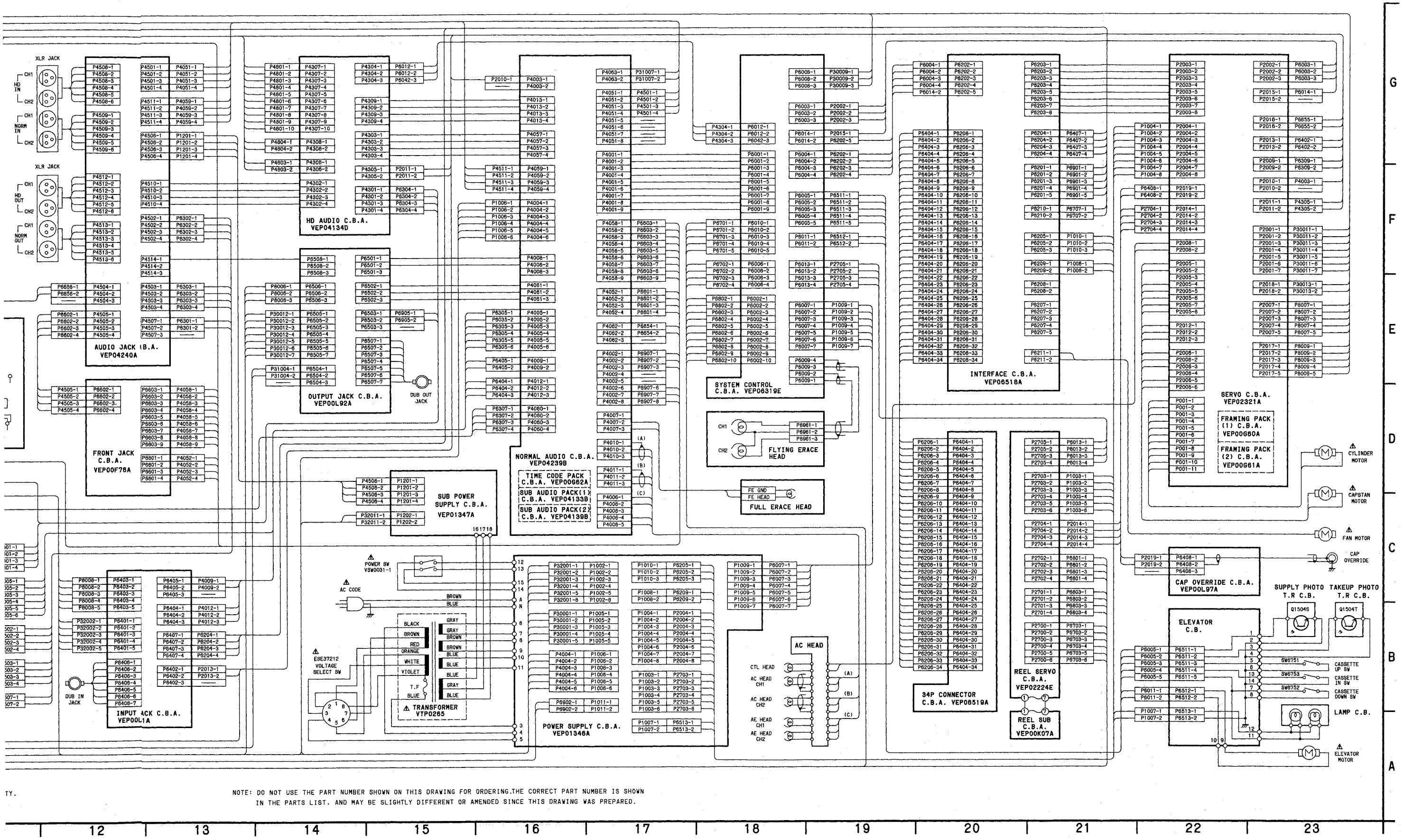

B
A
P6508
P6502
P6501
P6504
P6506
P6507
P6503
P6505
OUT PUT JACK CIRCUIT
REF. NO. 6500SERIES
ON
SW1
OFF
EDIT AUTO STOP
R3
R2
C1
R1
R4
R6
R5
DOC OUT
VIDEO3 OUT
VIDEO2 OUT
VIDEO1 OUT
AUDIO MONITOR
TIME CODE OUT
J5
J6
J4
J3
J2
J1
VJB00L92
VEP00L92
1
2
3
4

(FOIL SIDE)

INTERCONNECTION SCHEMATIC DIAGRAM


VIDEO C.B.A. VEP03557A
VIDEO SUB C.B.A. VEP00N06A
VIDEO METER PACK C.B.A. VEP00J21A
CHROMINANCE C.B.A. VEP18128A
METER C.B.A. VEP00G66A
VIDEO TRACKING
AUDIO CH1
AUDIO CH2
Y/C SEPARATION C.B.A. VEP03559A
SUB VIDEO C.B.A. VEP03558A
POCKET SWITCH CONNECTION C.B.A. VEP00L96A
KEY BOARD C.B.A. VEP06322D
SEARCH DIAL
REC AMP & HEAD AMP C.B.A. VEP05129B
HD AUDIO HEAD
VIDEO HEAD
S.S HEAD
XLR JACK
HD IN
NORM IN
HD OUT
NORM OUT
CH1
CH2
POCKET SWITCH VEP00L95A
SW1
SW2
SW3
SW4
SW5
DOLBY
HD REC
HD REC SELECT
Y/C FILTER
FRAME SERVO
LIMITER
CH-2 MIX REC
AUDIO OUT
IMAGE
SYNC
SW6
SW7
SW8
SW9
SW10
AUDIO JACK C.B.A. VEP04240A
FRONT JACK C.B.A. VEP00F76A
SUPPLY FORWARD TENSION SENSOR C.B.
SUPPLY REVERSE TENSION SENSOR C.B.
FRONT CONNECTION C.B.
SL6802 TAKEUP SOL.
SL6801 SUPPLY SOL.
M6601 S.REEL MOTOR
M6802 T.REEL MOTOR
SW6801 POSITION SW
SW6802 SAFETY TAB SW
SW6803 S-VHS CASSETTE SW
SL6701
LOADING MOTOR
DEW6701 DEW SENSOR
TAKEUP TENSION SENSOR C.B.
SENSOR LED C.B.
D6701
D6702
REEL SENSOR C.B.
IC6502
IC6501
PRESSURE ROLLER SOLENOID CONNECTION C.B.
S-VIDEO OUTPUT C.B.A. VEP00L94A
J6450
(4P Y)
(4P C)
S-VIDEO INPUT C.B.A. VEP00L93A
J6451
R6451 75
R6452 75
R6307 3300
PUSH ON
VIDEO LEVEL
R6308 15K
VR6309 5K
Q6301 2SB641
R6309 33
VIDEO VR C.B.A. VEP00J59B
EJECT C.B.A. VEP00J60A
D6971
D6972
D6973
D6974
D6975
D6976
R6971
R6972
R6973
R6974
SW6971
* R6971 ~ R6974 22
D6971 ~ D6973 LN31GCPHL
D6974 LN41YCPHLM
D6975 , D6976 LN3406CPYT
FRONT PANEL C.B.A. VEP06426B
DUB IN JACK
INPUT JACK C.B.A. VEP00L1A
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11
12

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

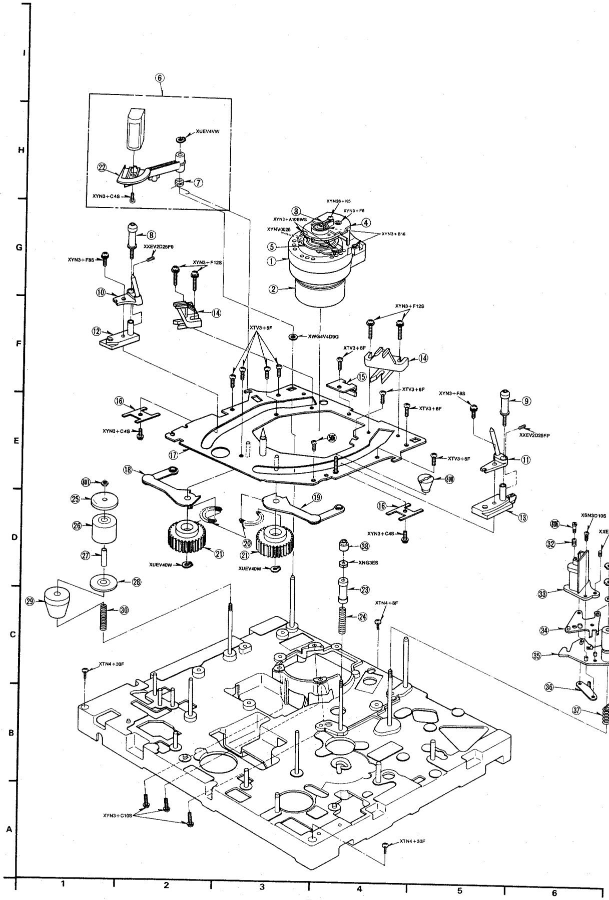

XLR JACK
HD IN
NORM IN
HD OUT
NORM OUT
CH1
CH2
AUDIO JACK C.B.A.
VEP04240A
FRONT JACK C.B.A.
VEP0F76A
INPUT JACK C.B.A.
VEP00L1A
DUB IN JACK
HD AUDIO C.B.A.
VEP04134D
OUTPUT JACK C.B.A.
VEP00L92A
DUB OUT JACK
SUB POWER SUPPLY C.B.A.
VEP01347A
POWER SW
VSW0031-1
AC CODE
BROWN
BLUE
BLACK
RED
ORANGE
WHITE
VIOLET
GRAY
T.F
ESE37212 VOLTAGE SELECT SW
TRANSFORMER VTP0265
NORMAL AUDIO C.B.A.
VEP04239B
TIME CODE PACK C.B.A. VEP00062A
SUB AUDIO PACK(1) C.B.A. VEP04133B
SUB AUDIO PACK(2) C.B.A. VEP04139B
POWER SUPPLY C.B.A.
VEP01346A
SYSTEM CONTROL C.B.A. VEP06319E
FLYING ERACE HEAD
FULL ERACE HEAD
FE GND
FE HEAD
AC HEAD
CTL HEAD
AC HEAD CH1
AC HEAD CH2
AE HEAD CH1
AE HEAD CH2
INTERFACE C.B.A.
VEP06518A
34P CONNECTOR C.B.A. VEP08519A
REEL SERVO C.B.A.
VEP02224E
REEL SUB C.B.A.
VEP00K07A
SERVO C.B.A.
VEP02321A
FRAMING PACK (1) C.B.A. VEP00G60A
FRAMING PACK (2) C.B.A. VEP00G61A
CYLINDER MOTOR
CAPSTAN MOTOR
FAN MOTOR
CAP OVERRIDE
CAP OVERRIDE C.B.A.
VEP00L97A
SUPPLY PHOTO T.R C.B.
TAKEUP PHOTO T.R C.B.
Q1504S
Q1504T
ELEVATOR C.B.
SW6751
SW6753
SW6752
CASSETTE UP SW
CASSETTE IN SW
CASSETTE DOWN SW
LAMP C.B.
ELEVATOR MOTOR
G
F
E
D
C
B
A
12
13
14
15
16
17
18
19
20
21
22
23

TY.

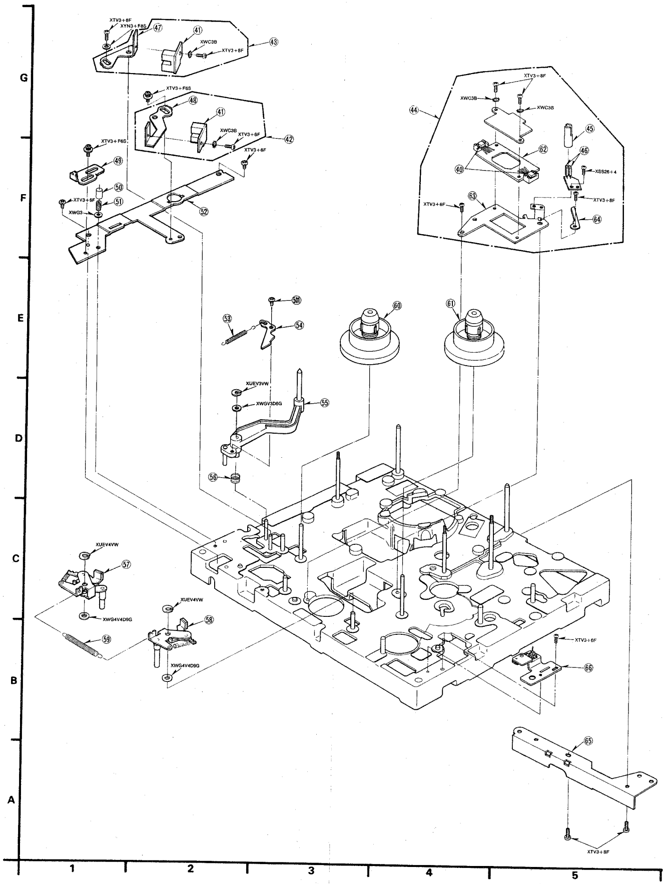
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST. AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

EXPLODED VIEWS

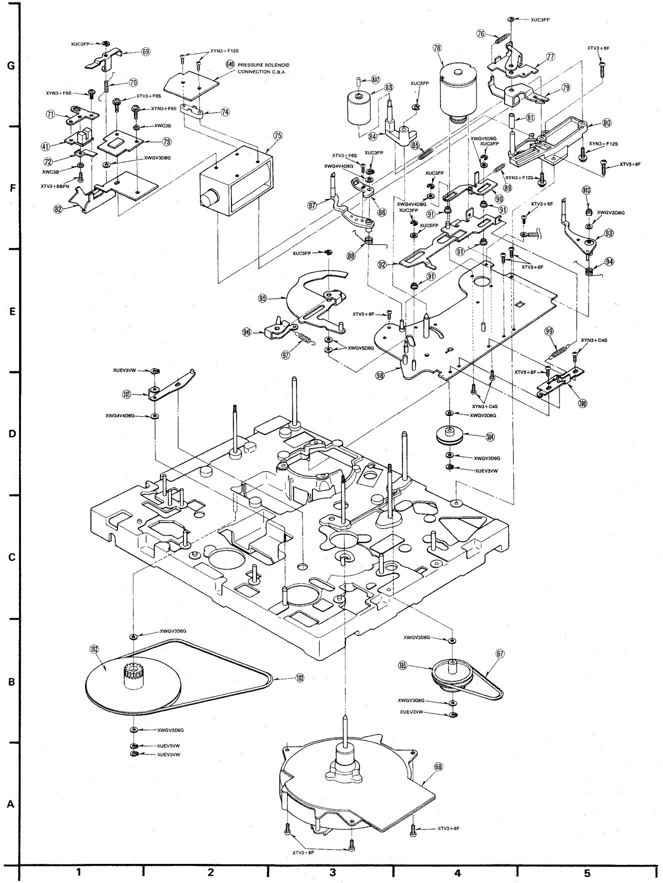
❶ *Transport Section*


I
H
G
F
E
D
C
B
A
⑥
XUEV4VW
㉒
⑦
XYN3+C4S
XYN26+K5
XYN3+F6
③
XYN3+A10BWS
④
XYNV0026
XYN3+B16
⑤
①
②
⑧
XXEV2D25F9
XYN3+F8S
XYN3+F12S
⑩
⑭
⑫
XTV3+6F
XWG4V4D9G
XYN3+F12S
XTV3+8F
⑭
⑮
XTV3+6F
XYN3+F8S
XTV3+6F
⑨
⑯
XYN3+C4S
(506)
XXEV2D25FP
⑰
⑪
XTV3+6F
⑱
(800)
(801)
⑲
㉕
⑯
⑬
㉖
XYN3+C4S
XSN3D10S
(806)
⑳
㉑
㉑
㊳
㉜
XXE3A8FPS
XNG4ES
㉗
XUEV40W
XUEV40W
XNG3ES
㉘
㉓
㉝
XYN3+F8S
㉙
㉚
XTN4+8F
㉔
㉞
XWG4
XTN4+30F
㉟
㊱
㊲
XYN3+C10S
XTN4+30F
1
2
3
4
5
6

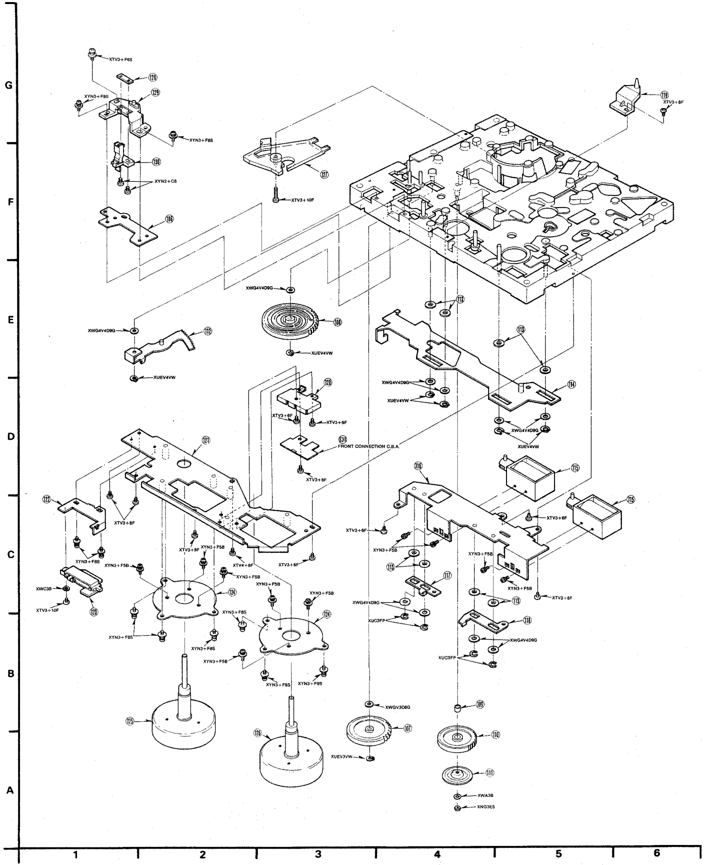
❷ *Moving Mechanism Section - (1)*


G
F
E
D
C
B
A
XTV3+6F
XYN3+F8S
㊼
㊶
XWC3B
XTV3+8F
㊸
XTV3+F6S
㊽
㊶
XWC3B
XTV3+6F
㊷
XTV3+F6S
XTV3+6F
㊾
㊿
(51)
XTV3+6F
XWG3
(52)
XTV3+8F
XWC3B
XWC3B
㊹
㊺
(62)
㊻
㊵
XSS26+4
XTV3+6F
(63)
XTV3+8F
(64)
(501)
(53)
(54)
(60)
(61)
XUEV3VW
XWGV3D6G
(55)
(56)
XUEV4VW
(57)
XWG4V4D9G
XUEV4VW
(58)
(59)
XWG4V4D9G
XTV3+6F
(66)
(65)
XTV3+8F
1
2
3
4
5

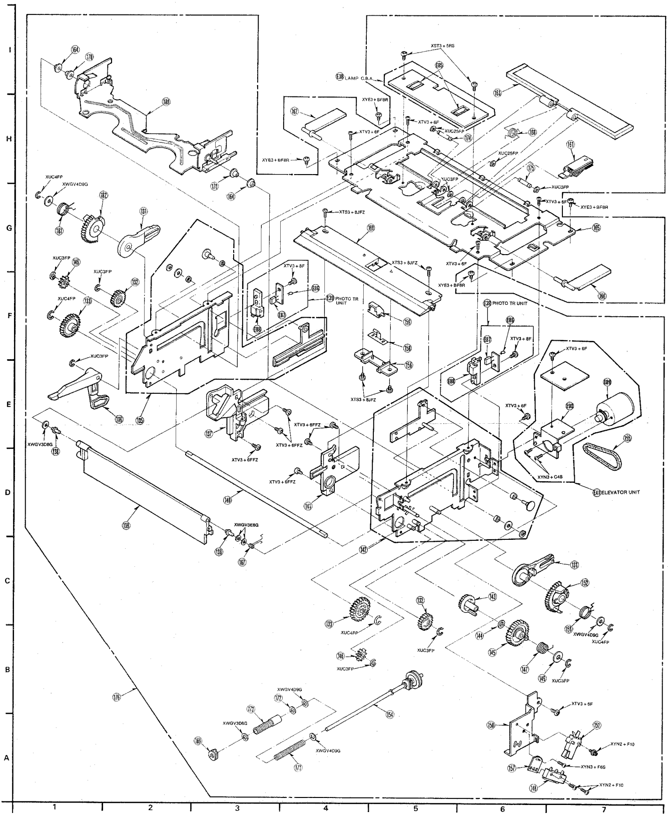
❸ Chassis Parts Section


G
F
E
D
C
B
A
1
2
3
4
5
XUC3FP
69
70
XYN3+F6S
XTV3+F6S
XYN3+F8S
XWC3B
71
41
73
72
XWGV3D6G
XWC3B
XTV3+6BFN
82
XYN3+F12S
E40 PRESSURE SOLENOID CONNECTION C.B.A.
74
75
802
83
84
XUC5FP
78
85
76
77
79
81
80
XTV3+8F
XYN3+F12S
XTV3+8F
XTV3+F6S
XUC3FP
XWG4V4D9G
87
86
88
XWGV5D9G
XUC3FP
89
XYN3+F12S
90
91
XWG4V4D9G
XUC3FP
XUC5FP
92
XTV3+6F
803
XWGV3D6G
93
94
XTV3+6F
95
96
97
XWGV5D9G
XTV3+6F
98
99
XYN3+C4S
XTV3+8F
100
XYN3+C4S
XWGV3D6G
104
XWGV3D6G
XUEV3VW
XUEV3VW
101
XWG4V4D9G
XWGV3D6G
102
103
XWGV3D6G
XUEV3VW
XUEV3VW
XWGV3D6G
105
67
XWGV3D6G
XUEV3VW
68
XTV3+8F
XTV3+8F

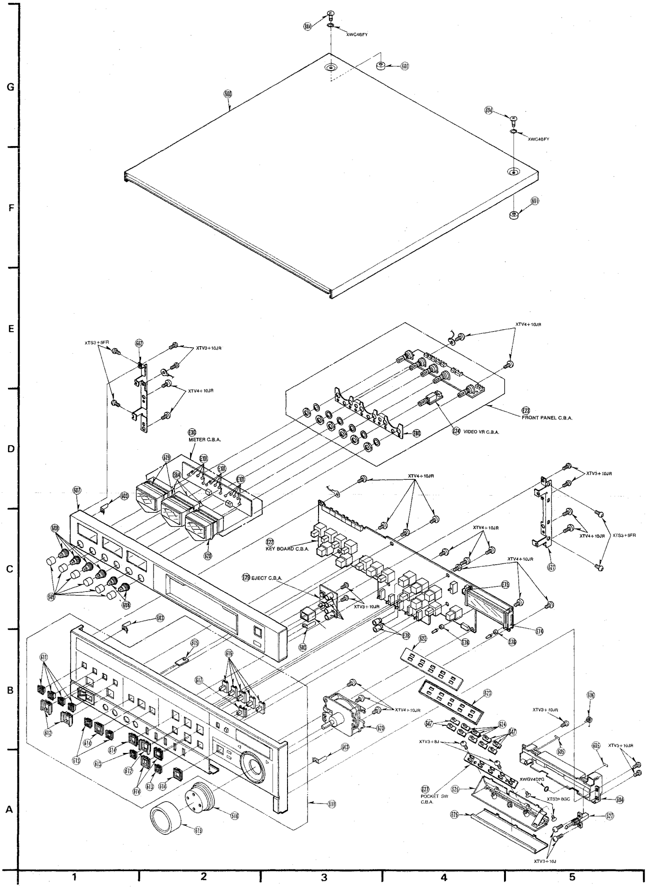
❹ Moving Mechanism Section - (2)


G
F
E
D
C
B
A
1
2
3
4
5
6
XTV3+F6S
128
129
XYN3+F8S
XYN3+F8S
130
XYN2+C8
106
127
XTV3+10F
119
XTV3+8F
XWG4V4D9G
108
XUEV4VW
XWG4V4D9G
112
XUEV4VW
113
113
114
XWG4V4D9G
XUEV4VW
XWG4V4D9G
XUEV4VW
120
XTV3+6F
XTV3+6F
E31 FRONT CONNECTION C.B.A.
XTV3+6F
121
122
XTV3+8F
XYN3+F8S
XWC3B
XTV3+10F
123
XTV3+8F
XYN3+F5B
XTV4+8F
XTV3+6F
XYN3+F5B
XYN3+F5B
124
XYN3+F8S
XYN3+F8S
XYN3+F5B
XYN3+F5B
XYN3+F8S
124
XYN3+F5B
XYN3+F8S
XYN3+F8S
125
126
116
115
115
XTV3+6F
XTV3+6F
XYN3+F5B
113
117
XWG4V4D9G
XUC3FP
XYN3+F5B
XYN3+F5B
XTV3+6F
113
118
XWG4V4D9G
XUC3FP
XWGV3D6G
107
XUEV3VW
109
110
111
XWA3B
XNG3ES

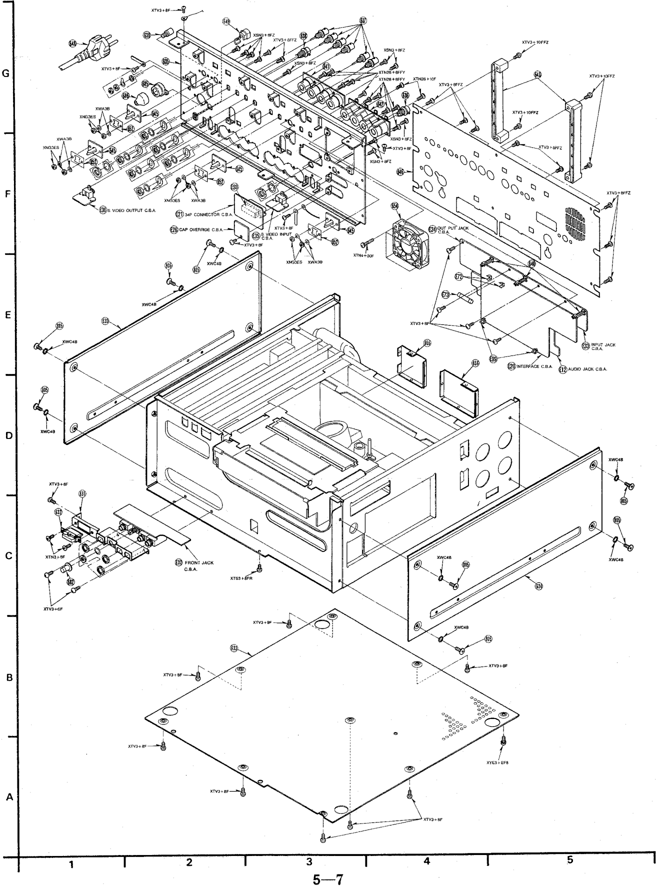
❺ Front Loading Mechanism Section


I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
(164)
(170)
(180)
(170)
(164)
XUC4FP
XWGV4D9G
(182)
(181)
(131)
XUC3FP
(146)
XUC3FP
(132)
XUC4FP
(133)
XUC3FP
(136)
(135)
XWGV3D6G
(138)
(139)
(137)
XTV3 + 6FFZ
XTV3 + 6FFZ
XTV3 + 6FFZ
XTV3 + 6FFZ
XTV3 + 6FFZ
(140)
(141)
XWGV3E6G
(138)
(167)
(142)
(176)
(E38) LAMP C.B.A.
XST3 + 5RS
(E85)
(162)
XYE3 + BF8R
XYE3 + BF8R
XTV3 + 6F
XTV3 + 6F
XUC25FP
(174)
(163)
(168)
XUC25FP
(161)
(175)
XUC3FP
XUC3FP
XTV3 + 6F
XYE3 + BF8R
(165)
XTS3 + 8JFZ
(160)
XTS3 + 8JFZ
XTV3 + 6F
XYE3 + BF8R
(166)
XTV3 + 8F
(E86)
(E39) PHOTO TR UNIT
(E87)
(E88)
(159)
(158)
(156)
XTS3 + 8JFZ
(E39) PHOTO TR UNIT
(E86)
(E87)
XTV3 + 8F
(E88)
XTV3 + 6F
(E89)
XTV3 + 6F
(E90)
(155)
XYN3 + C4S
(E41) ELEVATOR UNIT
(131)
(152)
(143)
(133)
XUC4FP
(132)
XUC3FP
(144)
(145)
(153)
XWGV4D9G
XUC4FP
(146)
XUC3FP
(147)
(149)
XUC3FP
XWGV4D9G
(172)
(173)
XWGV3D6G
(169)
XWGV4D9G
(171)
(154)
XTV3 + 6F
(150)
(151)
XYN2 + F10
(157)
XYN3 + F6S
(148)
XYN2 + F10

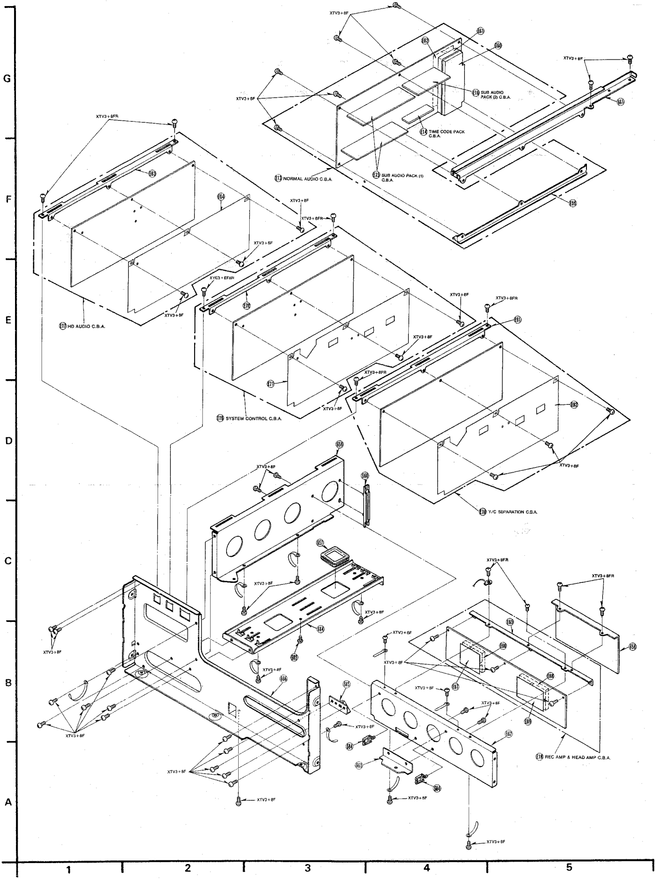
❻ *Chassis Frame Section - (1)*


G
F
E
D
C
B
A
1
2
3
4
5
604
XWC46FY
601
600
604
XWC46FY
601
XTS3+8FR
602
XTV3+10JR
XTV4+10JR
XTV4+10JR
E23
FRONT PANEL C.B.A.
E80
E24 VIDEO VR C.B.A.
E30
METER C.B.A.
629
E101
E101
E101
E84
607
603
608
609
608
628
XTV4+10JR
XTV3+10JR
XTV4+10JR
XTS3+8FR
621
E22
KEY BOARD C.B.A.
XTV4+10JR
XTV4+10JR
E29 EJECT C.B.A.
XTV3+10JR
E75
E74
E78
E76
E76
603
603
615
622
611
616
617
612
613
614
614
613
613
612
614
613
614
620
XTV4+10JR
623
647
624
647
XTV3+8J
XTV3+10JR
606
605
605
XTV3+10JR
603
610
618
619
E27
POCKET SW
C.B.A.
625
XWGV4D7G
XTS3+8GC
604
626
627
XTV3+10J

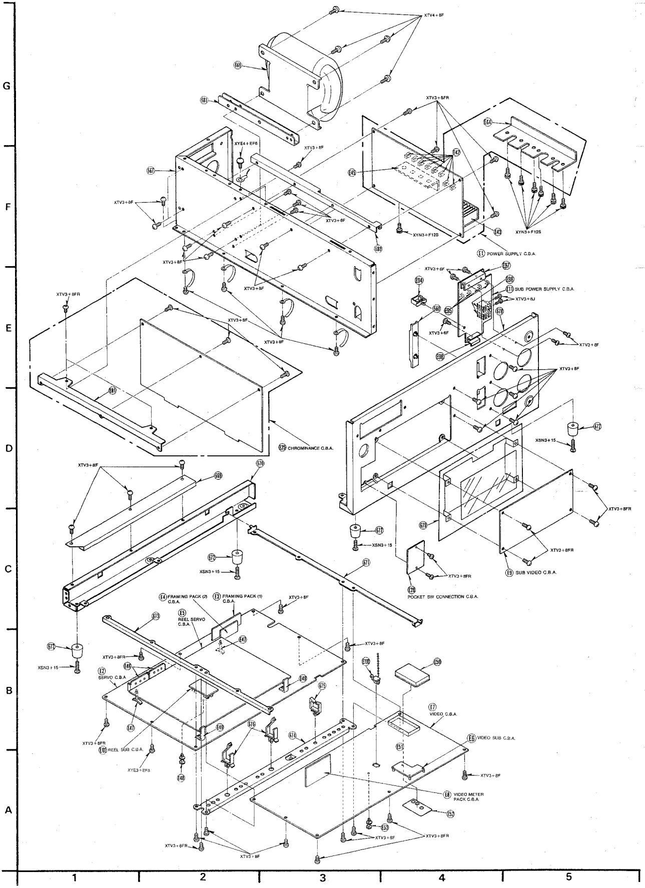
❼ Chassis Frame Section - (2)


G
F
E
D
C
B
A
1
2
3
4
5
XTV3+8F
649
637
639
648
XSN3+8FZ
XTV3+8FFZ
638
XSN3+8FZ
635
XTV3+8F
XSN3+8FZ
641
XTN26+6FFY
XTN26+6FFY
XTN26+10F
685
686
636
642
XWA3B
XNG3ES
645
652
XSN3+8FZ
XTV3+8F
XSN3+8FZ
XWA3B
XNG3ES
645
652
645
652
XNG3ES
XWA3B
E93
E36 S. VIDEO OUTPUT C.B.A.
E21 34P CONNECTOR C.B.A.
E26 CAP OVERRIDE C.B.A.
XTV3+8F
E35 S. VIDEO INPUT C.B.A.
XTV3+8F
645
652
XNG3ES
XWA3B
654
XTN4+30F
XTV3+10FFZ
643
XTV3+10FFZ
XTV3+8FFZ
XTV3+10FFZ
XTV3+8FFZ
646
XTV3+8FFZ
E34 OUT PUT JACK C.B.A.
646
E72
E73
XTV3+8F
E33 INPUT JACK C.B.A.
E99
E20 INTERFACE C.B.A.
E12 AUDIO JACK C.B.A.
805
XWC4B
805
XWC4B
630
805
XWC4B
805
XWC4B
655
656
XWC4B
805
805
XWC4B
XTV3+6F
631
632
XTN3+6F
682
XTV3+6F
E32 FRONT JACK C.B.A.
XTS3+8FR
XWC4B
805
634
XWC4B
805
XTV3+8F
633
XTV3+8F
XTV3+8F
XTV3+8F
XYE3+EF8
XTV3+8F
XTV3+8F

❽Casing Parts Section - (1)


XTV3+8F
E61
E62
E60
E16 SUB AUDIO PACK (2) C.B.A.
E14 TIME CODE PACK C.B.A.
E13 NORMAL AUDIO C.B.A.
E15 SUB AUDIO PACK (1) C.B.A.
661
E59
XTV3+8FR
E63
E64
XTV3+8FR
XYE3+EF8R
E70
E17 HD AUDIO C.B.A.
E71
E19 SYSTEM CONTROL C.B.A.
E91
E92
E10 Y/C SEPARATION C.B.A.
659
660
657
664
663
666
665
664
663
662
E65
E66
E67
E68
E69
658
E18 REC AMP & HEAD AMP C.B.A.
G
F
E
D
C
B
A
1
2
3
4
5

❾ Casing Parts Section - (2)



XTV4+8F
(568)
(681)
XYE4+EF6
XTV3+8F
(567)
XTV3+8F
XTV3+8F
XTV3+8F
XTV3+8F
(680)
XTV3+8FR
E45
E42
E44
XYN3+F12S
E43
XYN3+F12S
E1 POWER SUPPLY C.B.A.
XTV3+8FR
XTV3+8F
XTV3+8F
E81
E25 CHROMINANCE C.B.A.
XTV3+6F
E97
E96
E11 SUB POWER SUPPLY C.B.A.
XTV3+8J
E94
(660)
E95
XTV3+6F
(678)
E98
XTV3+8F
XTV3+8F
(672)
XSN3+15
XTV3+8FR
XTV3+8F
(669)
(670)
(672)
XSN3+15
(679)
(672)
XSN3+15
XTV3+8FR
E9 SUB VIDEO C.B.A.
XTV3+8FR
E28
POCKET SW CONNECTION C.B.A.
(671)
E4 FRAMING PACK (2) C.B.A.
E3 FRAMING PACK (1) C.B.A.
XTV3+8F
E5 REEL SERVO C.B.A.
(673)
E47
(672)
XSN3+15
XTV3+8FR
E46
E2 SERVO C.B.A.
E49
XTV3+8F
E106
E50
(675)
E7 VIDEO C.B.A.
E47
E49
(676)
(674)
XTV3+8FR
E107 REEL SUB C.B.A.
XYE3+EF8
E48
E6 VIDEO SUB C.B.A.
E51
XTV3+8F
E8 VIDEO METER PACK C.B.A.
E52
E53
XTV3+8FR
XTV3+8F
XTV3+8FR
XTV3+8F
G
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D
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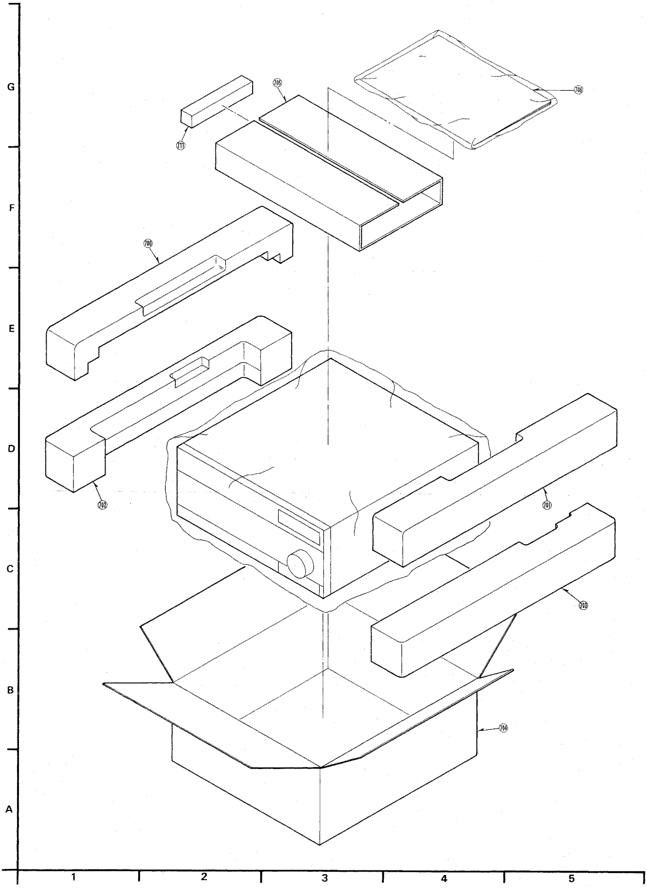
⑩ *Packing Parts Section*


G
F
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C
B
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705
706
711
700
702
701
703
704
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REPLACEMENT PARTS LIST

Notes:

1. • Be sure to make your orders of replacement parts according to this list.
   • "〈R〉" In Remark column indicates recommended parts.
   • "〈M〉" In Remark column indicates needed in the periodical maintenance.
2. IMPORTANT SAFETY NOTICE
   Components identified by " ! " have special characteristics important for safety.
   When replacing any of these components, use only the original ones.
   Meaning of symbol ! on this parts list is exactly the same as symbol ⚠ on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;
   All resistors are in OHMS (Ω), K=1,000Ω, M=1,000KΩ.
4. ITEM NUMBERS WITH CAPITAL LETTER E
   Item numbers with capital letter E (Example: E1, E2,...) in Ref. No. column mean that the parts are listed with the E item numbers in the exploded views.
5. The main assembled parts are shown below C.B.A. marked with "■".
6. When ordering parts, use part No. only from Part No. column.
7. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

1. SERVICING FIXTURES & TOOLS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VFM8180HMDH	VHS Alignment Tape	1	
		VFK0329	Post Adj. Screwdriver	1	
		VFK0132	Back Tension Meter	1	(T2-H7-UM)
			(Tentelometer,		
			Made in U.S.A.)		
		VFK0191	Post Adj. Plate	1	
		VFK0133	Dial Torque Gauge	1	
		VFK0134	Plastic Clamper Only	1	
		VFK0180	Adaptor for VFK0133	1	
		VFK0190	Reel Table Height Fixture	1	
		VFK0135	Eccentric Screwdriver	1	
		VFK0168	Cassette Holder Fixture	1	
		VFK0236	Tension Post Adj. Plate	1	
		VFK0394	FWD Sensor Adj. Fixture	1	
		VFK0393	REV Sensor Adj. Fixture	1	
		VFK0328	H-Position Adj. Fixture	1	
		VFK0330	Fine Adj. Screwdriver	1	
			(3mm Phi)		
		VFK0335	Retaining Ring Remover	1	
		VFK0326	Hex.Wrench Set	1	
		VFK0343	Check Light	1	
		MOR265	Molytone Grease	1	
		VFK27	Head Cleaning Stick	1	
		VFK0268	Stator A. Adj. Fixture	1	
		VFK0344	Post Height Adj. Fixture P1	1	
		VFK0345	Post Height Adj. Fixture P4	1	

2. MECHANICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VEH0414	UPPER CYLINDER UNIT	1	<R> <M>
2(1)		VEG0666	LOWER CYLINDER UNIT	1	<!> <R> <M>
3(1)		VXS0055	EARTH ANGLE	1	
4(1)		VXA3350	STATOR ANGLE	1	
5(1)		VXA1935	RT ROTOR BASE	1	
6(1)		VXL1003	ERASE HEAD UNIT	1	<R> <M>
7(1)		VMB1005	ERASE HEAD SPRING	1	
8(1)		VXP0761	ROLLER POST UNIT	1	
9(1)		VXP0302C	ROLLER POST UNIT	1	
10(1)		VXA1191	INCLIND BASE (S) UNIT	1	<R> <M>
11(1)		VXA1084	INCLIND BASE (B) UNIT	1	<R> <M>
12(1)		VXA1169	SHAFT HOLDER (S) UNIT	1	
13(1)		VXA1333	SHAFT HOLDER (T) UNIT	1	
14(1)		VMD0100	POST STOPPER	2	
15(1)		VMA4122	LEAD WIRE ANGLE	1	
16(1)		VMA4436	SHAFT HOLDER STOPPER (A)	2	
17(1)		VXA1334	LOADING BASE UNIT	1	
18(1)		VXL0753	LOADING ARM (L) UNIT	1	
19(1)		VXL0861	LOADING ARM (R) UNIT	1	
20(1)		VMB0669	LOADING SPRING	2	
21(1)		VXP0505	LOADING GEAR UNIT	2	
22(1)		VML1370	ERASE HEAD LEVER	2	
23(1)		VMX0280	POST SLEEVE	1	
24(1)		VMB0699	P4 SPRING	1	
25(1)		VMX1302	UPPER LIMITER	1	
26(1)		VXP0921	SUPPLY ROLLER	1	
27(1)		VMX1268	COLLAR	1	
28(1)		VMX1302	LOWER LIMITER (S)	1	
29(1)		VMX0663	LOWER LIMITER ROLLER	1	
30(1)		VMB0754	SUPPLY LIMITER SPRING	1	
32(1)		VMB1251	ADJUST SPRING	1	
33(1)		VBR0147	A/C HEAD	1	<R> <M>
34(1)		VXA1990	A/C HEAD BASE	1	
35(1)		VXA1438	A/C HEAD BASE(B) UNIT	1	
36(1)		VMA4289	NUT BAR	1	
37(1)		VMB0668	A/C HEAD HEIGHT SPRING	1	
38(1)		VKF0637	P4 CAP	1	
40(2)		DN838A	IC	2	<R>
41(2)(3)		ON1108	PHOTO SENSOR	3	<R>
42(2)		VXA1899	SUPPLY FORWARD TENSION	1	
			SENSOR UNIT		
43(2)		VXA1787	SUPPLY REVERSE TENSION	1	
			SENSOR UNIT		
44(2)		VXA1768	REEL SENSOR BASE UNIT	1	
45(2)		VMD0145	LED HOLDER	1	
46(2)		LN58	LED	2	<R>
47(2)		VMA6190	SENSOR BASE (R)	1	
48(2)		VMA6191	SENSOR BASE (F)	1	
49(2)		VMA6192	SPRING ANGLE	1	
50(2)		VMG0283	CASSETTE UP STOPPER	1	
51(2)		VMS1743	SIDE LEVER SCREW	1	
52(2)		VMA6189	POSITION PLATE (L)	1	
53(2)		VMB1129	TENSION SPRING	1	
54(2)		VML1460	SENSOR LEVER	1	
55(2)		VXL1073	TENSION ARM UNIT	1	<R> <M>
56(2)		VMB1127	TENSION ARM SPRING	1	
57(2)		VXZ0148	BRAKE LEVER (L) UNIT	1	<R> <M>
58(2)		VXZ0149	BRAKE LEVER (R) UNIT	1	<R> <M>
59(2)		VMB0661	BRAKE SPRING	1	
60(2)		VXR0113	SUPPLY REEL TABLE UNIT	1	<R> <M>
61(2)		VXR0113	TAKEUP REEL TABLE UNIT	1	<R> <M>
62(2)		VMD0336	HALL IC BRACKET	1	
63(2)		VMA4891	REEL SENSOR BASE	1	
64(2)		VMA6005	WIRE STOPPER	1	
65(2)		VMA4406	CHASSIS BRACKET	1	
66(2)		VXA3008	POSITION PLATE (R)	1	<R>
67(3)		VDV0122	LOADING BELT (1)	1	<R> <M>
68(3)		VEM0164	DD CAPSTAN UNIT	1	<!> <R> <M>
69(3)		VML1336	SENSOR LEVER (R)	1	
70(3)		VMP0953	SENSOR SPRING (R)	1	
71(3)		VMA4893	SENSOR BASE (R)	1	
72(3)		VMA6326	WIRE STOPPER	1	

REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
73(3)		VEK0854	DEW SENSOR UNIT	1	<R>
74(3)		VMD0555	SPACER	1	
75(3)		VSJ0063	PRESSURE ROLLER SOLENOID	1	
76(3)		VMB0719	PRESSURE SPRING	1	
77(3)		VML1339	SOLENOID LEVER (A)	1	
78(3)		VEM0135	LOADING MOTOR UNIT	1	<!> <R>
79(3)		VML1329	SOLENOID LEVER (B)	1	
80(3)		VXA1236	SOLENOID BRACKET UNIT	1	
81(3)		VMX0275	SLEEVE	1	
82(3)		VXA1790	OPENER UNIT	1	
83(3)		VXG0013S	PRESSURE ROLLER	1	<R> <M>
84(3)		VXL1423	PRESSURE ROLLER ARM(1) UNIT	1	
85(3)		VMB0947	PRESSURE ROLLER ARM SPRING	1	
86(3)		VXL0907	ADJUST LEVER UNIT	1	
87(3)		VXL0906	SUB LOADING ARM UNIT	1	
88(3)		VMB0723	SUB LOADING ARM SPRING	1	
89(3)		VMB0949	LEVER SPRING	1	
90(3)		VMM0091	ACTION SLIDE SUB LEVER	1	
91(3)		VMX0122	SLIDE WASHER (A)	4	
92(3)		VXL0901	ACTION SLIDE LEVER UNIT	1	
93(3)		VXL0995	PULL OUT ARM UNIT	1	
94(3)		VMB0752	PULL OUT ARM SPRING	1	
95(3)		VXL0900	ACTION LEVER UNIT	1	
96(3)		VML1327	ACTION SUB-LEVER UNIT	1	
97(3)		VMB0950	ACTION SUB LEVER SPRING	1	
98(3)		VXK0496	PRESSURE ROLLER BASE UNIT	1	
99(3)		VMB0948	ACTION SLIDER RETURN SPRING	1	
100(3)		VMA6200	SPRING HOOK	1	
101(3)		VXL0944	ACTION LEVER UNIT	1	
102(3)		VDP0748	LARGE PULLEY	1	
103(3)		VDV0135	LOADING BELT (2)	1	<R> <M>
104(3)		VDP0750	IDLER PULLEY	1	
105(3)		VDP0735	LOADING INTERMEDIATE PULLEY	1	
106(4)		VMA6203	SAFETY TAB SWITCH ANGLE	1	
107(4)		VDG0017	INTERMEDIATE GEAR	1	
108(4)		VDG0096	CAM GEAR	1	<R>
109(4)		VMX0268	ACTION GEAR SLEEVE	1	
110(4)		VDG0016	ACTION GEAR	1	
111(4)		VMA4088	ACTION GEAR HOLDER	1	
112(4)		VXL0898	SECTOR GEAR	1	
113(4)		VMX0308	SLIDE WASHER	8	
114(4)		VXL1074	MAIN LEVER UNIT	1	
115(4)		VSJ0062	BRAKE SOLENOID	2	<R>
			(SUPPLY) (TAKEUP)		
116(4)		VXK0606	SOLENOID BASE (1) UNIT	1	
117(4)		VMM0114	MAIN BRAKE RELEASE LEVER(L)	1	
118(4)		VMM0115	MAIN BRAKE RELEASE LEVER(R)	1	
119(4)		VMD0277	BRAKE RELEASE BRACKET	1	
120(4)		VMA6300	FRONT CONNECTION C.B. ANGLE	1	
121(4)		VXK0603	SUB CHASSIS (1) UNIT	1	
122(4)		VMA4895	MODE SELECT SWITCH HOLDER	1	
123(4)		VSS0057	MODE SELECT SWITCH	1	<R>
124(4)		VMA6194	MOTOR BASE	2	
125(4)		KFN56DB3AS	REEL MOTOR (SUPPLY)	1	<!> <R> <M>
126(4)		KFN56DB3AT	REEL MOTOR (TAKEUP)	1	<!> <R> <M>
127(4)		VGF0021	BELT COVER	1	
128(4)		VMA5372	NUT PLATE	1	
129(4)		VMA5826	CASSETTE SUPPORT ANGLE	1	
130(4)		VSM0043	SAFETY TAB SWITCH	1	<R>
131(5)		VML1712	WIPER ARM	2	
132(5)		VDG0235	LARGE INTERMEDIATE GEAR	2	
133(5)		VDG0119	SHAFT GEAR	2	
135(5)		VXA2354	SIDE PLATE (L) UNIT	1	
136(5)		VML1711	FRONT OPENER LINK	1	
137(5)		VMD0768	FRONT GUIDE (L)	1	
138(5)		VMS2350	BLINDER PANEL SHAFT	2	
139(5)		VKF1198	BLINDER PANEL	1	<R>
140(5)		VMS2304	MAIN SHAFT	1	
141(5)		VMD0767	FRONT GUIDE (R)	1	
142(5)		VXA2355	SIDE PLATE (R) UNIT	1	
143(5)		VDG0233	CLUTCH GEAR	1	
144(5)		VMX0531	CLUTCH SPACER	1	
145(5)		VDG0234	WARM WHEEL	1	
146(5)		VDG0236	SMALL INTERMEDIATE GEAR	2	
147(5)		VMB1402	CLUTCH SPRING	1	
148(5)		VSM0026	SWITCH	1	<R>
149(5)		VMX0530	CLUTCH WASHER	1	
150(5)		VMA6702	SWITCH ANGLE	1	
151(5)		VSM0049	SWITCH	2	<R>
152(5)		VDG0183	WIPER GEAR (R)	1	
153(5)		VMB1309	WIPER SPRING (R)	1	
154(5)		VXP0670	PULLEY SHAFT UNIT	1	
155(5)		VDV0144	ELEVATOR MOTOR BELT	1	<R> <M>
156(5)		VMD0454	SPRING HOLDER	1	
157(5)		VMA6715	SWITCH BASE	1	
158(5)		VMB1091	SAFETY TAB SPRING	1	
159(5)		VMD0453	SAFETY TAB KNOB	1	
160(5)		VMD0452	CASSETTE GUIDE	1	
161(5)		VSM0047	CASSETTE IN SWITCH	1	<R>
162(5)		VMD0492	MIRROR DRIVE PANEL (L)	1	
163(5)		VXA1795	MIRROR UNIT	1	
164(5)		VDP0944	WIPER ROLLER (S)	2	
165(5)		VMA6494	FRONT LOADING TOP PLATE	1	
166(5)		VMD0491	MIRROR DRIVE PANEL (R)	1	
167(5)		VMB1171	BLINDER SPRING	1	
168(5)		VMB1125	MIRROR SPRING	1	
169(5)		VDB0660	WARM SHAFT BEARING	1	
170(5)		VDP0918	CASSETTE HOLDER ROLLER(S)	2	
171(5)		VMB1400	PULLEY SHAFT SPRING	1	
172(5)		VMX0934	WARM WASHER	1	
173(5)		VDG0232	WARM UNIT	1	
174(5)		VMS2605	MIRROR SHAFT (B)	1	
175(5)		VMS2604	MIRROR SHAFT (A)	1	
176(5)		VXA3561	FRONT LOADING UNIT	1	
180(5)		VXA2356	CASSETTE HOLDER UNIT	1	
181(5)		VMB1310	WIPER SPRING (L)	1	
182(5)		VDG0182	WIPER GEAR (L)	1	
600(6)		VGM0288	TOP PANEL	1	
601(6)		VMX0871	SCREW SPACER	2	
602(6)		VMP0912	REINFORCEMENT ANGLE (L)	1	
603(6)		VSC1703	GROUND ANGLE	4	
604(6)		VGQ0981	SWITCH BOX	1	
605(6)		VMT0157	RUBBER CUSHION	2	
606(6)		VMB1493	EJECT SPRING	1	
607(6)		VYP2452	FRONT PANEL UNIT (UPPER)	1	<R>
608(6)		VGU2943	VOLUME KNOB	6	<R>
609(6)		VMG0354	RUBBER CAP	6	<R>
610(6)		VYP1947	FRONT PANEL UNIT (LOWER)	1	
611(6)		VGQ0977	GUARD SPACER (A)	4	
612(6)		VGQ0974	GUARD SPACER (B)	3	
613(6)		VGQ0976	GUARD SPACER (C)	4	
614(6)		VGQ0975	GUARD SPACER (D)	5	
615(6)		VMP0917	SPACER	1	
616(6)		VGU2946	SELECT SWITCH KNOB	5	<R>
617(6)		VGU2940	MEMORY KNOB	1	<R>
618(6)		VGU2941	SEARCH KNOB	1	<R>
619(6)		VMG0353	RUBBER CAP	1	<R>
620(6)		VSP0185	SEARCH DIAL UNIT	1	
621(6)		VMP0911	REINFORCEMENT ANGLE (R)	1	
622(6)		VGH1794	PANEL	1	
623(6)		VKF1123	SWITCH PANEL	1	
624(6)		VGU3465	SWITCH KNOB A	4	
625(6)		VKF0962	C.BOARD HOLDER	1	
626(6)		VGK1671	SURFACE PANEL	1	<R>
627(6)		VGU2944	JOCK UNIT	1	
628(6)		VSE0066	TRACKING METER	1	<R>
629(6)		VSE0065	AUDIO METER	2	<R>
630(7)		VGM0290	SIDE COVER (L)	1	<R>
631(7)		VMP0909	FRONT JACK ANGLE	1	
632(7)		VSW0031	POWER SWITCH	1	<!> <R>
633(7)		VKM1072	BOTTOM COVER	1	<R>
634(7)		VGM0289	SIDE COVER (R)	1	<R>
635(7)		VJH0500	REAR JACK ANGLE	1	
636(7)		VJP1132	DUB IN CONNECTOR	1	
637(7)		VJS1440	BNC JACK	6	
638(7)		VJS1132	DUB OUT CONNECTOR	1	
639(7)		VJH0082	GROUND TERMINAL	1	
640(7)		VMX1538	P.C.BOARD CLAMPER	3	
641(7)		VJP2524	XLR CONNECTOR (MALE)	1	<R>

3. ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
642(7)		VJS2525	XLR CONNECTOR (FEMALE)	1	<R>
643(7)		VGQ0978	REAR FOOT	2	
645(7)		VJJQ082	PHONO PIN JACK	4	<R>
646(7)		VGH1793	REAR PANEL	1	
647(6)		VGU4556	SWITCH KNOB B	6	
648(7)		VJA0169	AC POWER CORD	1	<!> <R> FOR AG-7500-E/EP
648(7)		VJA0074	AC POWER CORD	1	AG-7500-B
648(7)		VJA0087	AC POWER CORD	1	AG-7500-A
649(7)		VDB0293	AC POWER CORD BUSHING	1	<!> <R>
652(7)		VMP1028	PHONO PIN JACK PLATE	4	
654(7)		VRF0049	FAN MOTOR	1	<!> <R>
655(7)		VSC2100	HD HEAD AMP SHIELD CASE (TOP)	1	
656(7)		VSC2103	VIDEO HEAD AMP SHIELD CASE (TOP)	1	
657(8)		VJF0110	CAPABLE BUSH	1	
658(8)		VSC2187	HEAD AMP SHIELD PLATE CASE (TOP)	1	
659(8)		VMP0901	CHASSIS FRAME (LEFT)	1	FOR AG-7500-E/EP/B/A
660(8)		VGQ1016	C.BOARD GUIDE RAIL	2	
661(8)		VMP0896	SIDE FRAME SUPPORT ANGLE	1	
662(8)		VMP1319	CENTER FRAME	1	
663(8)		VMP0900	CHASSIS FRAME (CENTER)	1	
664(8)		VMP1320	C.BOARD HOLDER PLATE	1	
665(8)		VMP0899	CHASSIS FRAME (R)	1	
666(8)		VXA2589	FRONT FRAME UNIT	1	
667(9)		VMP0897	REAR FRAME (L)	1	
668(9)		VTP0265	POWER TRANSFORMER	1	<!> <R>
669(9)		VSC1718	SHIELD CASE	1	
670(9)		VXA2590	SIDE FRAME (L) UNIT	1	
671(9)		VMP0908	C.BOARD ANGLE (R)	1	
672(9)		VMG0172	RUBBER FOOT	4	
673(9)		VMP0906	C.BOARD ANGLE (F)	1	
674(9)		VMP0907	C.BOARD ANGLE (C)	1	
675(9)		VJF0022	LEAD WIRES CLAMPER	1	
676(9)		VJF0056	LEAD WIRES CLAMPER	2	
678(9)		VXA2591	SIDE FRAME (R) UNIT	1	
679(9)		VSC1810	C.BOARD SHIELD PLATE	1	
680(9)		VMP1023	TRANSFORMER ANGLE (A)	1	
681(9)		VMP1024	TRANSFORMER ANGLE (B)	1	
682(7)		VGT0341	TRACKING KNOB	1	
683(8)		VMX1525	SPACER	1	
684(8)		VJF0004	WIRE SADDLE	2	
685(7)		ESE37212	VOLTAGE SELECTSW	1	
686(7)		VMX0235	SW COVER	1	
700(10)		VPN1433	LEFT TOP CUSHION	1	
701(10)		VPN1431	RIGHT TOP CUSHION	1	
702(10)		VPN1434	LEFT BOTTOM CUSHION	1	
703(10)		VPN1432	RIGHT BOTTOM CUSHION	1	
704(10)		VPG4464	PACKING CASE	1	FOR AG-7500-E <R>
704(10)		VPG4465	PACKING CASE	1	FOR AG-7500-B <R>
704(10)		VPG4466	PACKING CASE	1	FOR AG-7500-A <R>
704(10)		VPG4547	PACKING CASE	1	FOR AG-7500-EP <R>
705(10)		VPN1581	TOP PAD	1	
706(10)		VQT2882	OPERATING INSTRUCTIONS	1	<!> <R> (ENGLISH)
706(10)		VQT2883	OPERATING INSTRUCTIONS	1	<!> <R> (GERMAN & FRENCH)
706(10)		VQT2960	OPERATING INSTRUCTIONS	1	<!> <R> (ITALIAN & SPANISH)
711(10)		VFA0055	Y/C CABLE	1	<R>
800(1)		VHN0014	"X" ADJUST NUT	1	
801(1)		VHD0045	NUT	1	
802(3)		VHN0051	PRESSURE ROLLER SCREW	1	
803(3)		VHD0045	NUT	1	
804(6)		VHD0222	SCREW	2	
805(7)		VHD0426	SCREW	8	
806(1)		VHD0054	ADJUST SCREW	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E1		VEP01346A	POWER SUPPLY C.B.A.	1	(NLA)<R>
E2		VEP02321A	SERVO C.B.A.	1	(NLA)<R> INCLUDING THE FRAMING PACK (1) C.B.A. (VEP00G60A) FRAMING PACK (2) C.B.A. (VEP00G61A)
E3		VEP00G60A	FRAMING PACK (1) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN SERVO C.B.A. (VEP02321A)
E4		VEP00G61A	FRAMING PACK (2) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN SERVO C.B.A. (VEP02321A)
E5		VEP02224E	REEL SERVO C.B.A.	1	(NLA)<R> INCLUDING THE REEL SUB C.B.A. (VEP00K07A)
E102		VEP00K07A	REEL SUB C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN REEL SERVO C.B.A. (VEP02224E)
E7		VEP03557A	VIDEO C.B.A.	1	(NLA)<R> INCLUDING THE VIDEO METER PACK C.B.A. (VEP00J21A)
E8		VEP00J21A	VIDEO METER PACK C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN VIDEO C.B.A. (VEP03557A)
E9		VEP03558A	SUB VIDEO C.B.A.	1	(NLA)<R>
E10		VEP03559A	Y/C SEPARATION C.B.A.	1	(NLA)<R>
E11		VEP01347A	SUB POWER SUPPLY C.B.A.	1	(NLA)<R>
E12		VEP04240A	AUDIO JACK C.B.A.	1	(NLA)<R>
E13		VEP04239B	NORMAL AUDIO C.B.A.	1	(NLA)<R> INCLUDING THE TIME CODE PACK C.B.A. (VEP00G62A) SUB AUDIO PACK (1) C.B.A. (VEP04133B) SUB AUDIO PACK (2) C.B.A. (VEP04139B)
E14		VEP00G62A	TIME CODE PACK C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN NORMAL AUDIO C.B.A. (VEP04239B)
E15		VEP04133B	SUB AUDIO PACK (1) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN NORMAL AUDIO C.B.A. (VEP04239B)
E16		VEP04139B	SUB AUDIO PACK (2) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN NORMAL AUDIO C.B.A. (VEP04239B)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E17		VEP04134D	HD AUDIO C.B.A.	1	(NLA)<R>
E18		VEP05129B	REC AMP & HEAD AMP C.B.A.	1	(NLA)<R>
E19		VEP06319E	SYSTEM CONTROL C.B.A.	1	(NLA)<R>
E20		VEP06518A	INTERFACE C.B.A.	1	(NLA)<R>
E21		VEP06519A	34P CONNECTOR C.B.A.	1	(NLA)<R>
E22		VEP06322D	KEY BOARD C.B.A.	1	(NLA)<R>
E23		VEP06426B	FRONT PANEL C.B.A.	1	(NLA)<R>
					INCLUDING THE
					VIDEO VR C.B.A.
					(VEP00J59B)
E24		VEP00J59B	VIDEO VR C.B.A.	1	(NLA)<R>
					PARTS LIST IS
					INCOLUDED IN FRONT
					PANEL C.B.A.
					(VEP06426B)
E25		VEP08128A	CHROMINANCE C.B.A.	1	(NLA)<R>
E26		VEP00L97A	CAP OVERRIDE C.B.A.	1	(NLA)<R>
E27		VEP00L95A	POCKET SW C.B.A.	1	(NLA)<R>
E28		VEP00L96A	POCKET SW CONNECTION C.B.A.	1	(NLA)<R>
E29		VEP00J60A	EJECT C.B.A.	1	(NLA)<R>
E30		VEP00G66A	METER C.B.A.	1	(NLA)<R>
E31		VEK3381	FRONT CONNECTION C.B.A.	1	(NLA)<R>
E32		VEP00F76A	FRONT JACK C.B.A.	1	(NLA)<R>
E33		VEP00L91A	INPUT JACK C.B.A.	1	(NLA)<R>
E34		VEP00L92A	OUTPUT JACK C.B.A.	1	(NLA)<R>
E35		VEP00L93A	S.VIDEO INPUT C.B.A.	1	(NLA)<R>
E36		VEP00L94A	S.VIDEO OUTPUT C.B.A.	1	(NLA)<R>
E38		VEK3849	LAMP C.B.A.	1	(NLA)<R>
E39		VEK3848	PHOTO TR.UNIT	2	(NLA)<R>
E40		VEK3832	PRESSURE ROLLER SOLENOID	1	(NLA)<R>
			CONNECTION C.B.A		
E41		VEM0256	ELEVATOR UNIT	1	(NLA)<R>
	■	VEP01346A	POWER SUPPLY C.B.A.		
			CAPACITORS		
C1001		ECQU2A823MN	P.CAPACITOR 250V 0.082U	1	<!><R>
C1002		ECES1EG682M	E.CAPACITOR 25V 6800U	1	
C1003		ECEA1CU471	E.CAPACITOR 16V 470U	1	
C1004		ECEA1EPZ471	E.CAPACITOR 25V 470U	1	
C1005,06		ECEA1AU471	E.CAPACITOR 10V 470U	2	
C1007		ECES1VG472M	E.CAPACITOR 25V 4700U	1	
C1008		ECEA1VU101	E.CAPACITOR 35V 100U	1	

Ref.No.		Part.No.	Part Name & Description	Pcs	Remarks
C1009		ECES1VG472M	E.CAPACITOR 25V 4700U	1	
C1010		ECEA1EU102	E.CAPACITOR 25V 1000U	1	
C1011		ECEA1CU471	E.CAPACITOR 16V 470U	1	
C1012,13		ECEA1CU100	E.CAPACITOR 16V 10U	2	
C1014		ECQM1H222KV	P.CAPACITOR 50V 2200P	1	
C1015		ECQM1H822KV	P.CAPACITOR 50V 8200P	1	
C1016,17		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C1018		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C1019,20		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	2	
C1021		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C1022		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
D1001		RBV601	DIODE	1	<!><R>
D1002		RD16EB	ZENER 16V	1	<R>
D1003		RBV401	DIODE	1	<!><R>
D1004		ERC84009	DIODE	1	<R>
D1005		RBV601	DIODE	1	<!><R>
D1006		RK46	DIODE	1	<R>
D1007		MA165	DIODE	1	<R>
D1008		MA4130M	DIODE	1	<R>
D1009		MA165	DIODE	1	<R>
D1011		MA165	DIODE	1	<R>
D1012		MA4100	DIODE	1	<R>
D1013		MA165	DIODE	1	<R>
F1001		XBA2C25TB0	FUSE 2.5A	1	<!><R>
F1002		XBA2C40TB0	FUSE 4A	1	<!><R>
F1003		XBA2C31TB0	FUSE 3.15A	1	<!><R>
F1004		XBA2C50TB0	FUSE 5A	1	<!><R>
IC1001		UPC393C	IC	1	<R>
IC1002		UPC4556C	IC	1	<R>
IC1003,04		SI3052V	IC	2	<!><R>
IC1005,06		SI3122V	IC	2	<!><R>
IC1007		UPC393C	IC	1	<R>
IC1008		UPC4556C	IC	1	<R>
L1001		VTQ0006	COIL	1	<!><R>
L1002,03		VLQ0283	COIL	2	
P1002		VJP1233R	CONNECTOR(MALE) 6P	1	
P1003		VJP1233T	CONNECTOR(MALE) 6P	1	
P1004		VJP1235R	CONNECTOR(MALE) 8P	1	
P1005		VJP1232R	CONNECTOR(MALE) 5P	1	
P1006		VJP1233G	CONNECTOR(MALE) 6P	1	
P1007		VJP1229T	CONNECTOR(MALE) 2P	1	
P1008		VJP1229	CONNECTOR(MALE) 2P	1	
P1009		VJP1234T	CONNECTOR(MALE) 7P	1	
P1010		VJP1230T	CONNECTOR(MALE) 3P	1	
P1011		VJP1229	CONNECTOR(MALE) 2P	1	
Q1001		2SD1266	TRANSISTOR	1	(Q,R)<R><!>
Q1002		2SD639	TRANSISTOR	1	(P,Q)<R>
Q1003		2SD1444A	TRANSISTOR	1	(P,Q.R)<R><!>
Q1004		2SB643	TRANSISTOR	1	(R,S)<R>
Q1005		2SD637	TRANSISTOR	1	(Q,R)<R>
Q1006		2SB643	TRANSISTOR	1	(R,S)<R>
Q1007		2SD1444A	TRANSISTOR	1	(P,Q,R)<R><!>
			RESISTORS		
R1001		ERD52TJ332	C.RESISTOR 1/4W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1003		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R1004		EROS2CKF5101	M.RESISTOR 1/4W 5.1K	1	
R1005		EROS2CKF3001	M.RESISTOR 1/4W 3K	1	
R1006		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1007-09		ERDS2TJ104	C.RESISTOR 1/4W 100K	3	
R1010,11		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R1012		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1013		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1014		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1015		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1016		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R1019		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R1020		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R1021		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R1022,23		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R1024		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1025		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R1026		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R1027		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R1028		EROS2CKF1801	M.RESISTOR 1/4W 1.8K	1	
R1029		EROS2CKF5601	M.RESISTOR 1/4W 5.6K	1	
R1030		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R1031		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R1032		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R1033		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R1034		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
VR1001		EVM31GA00B53	V.RESISTOR 5K	1	
			MISCELLANEOUS		
E42		VJS0039	FUSE HOLDER	8	<!><R>
E43		VSC1323	HEAT SINK	7	
E44		VSC2099	HEAT SINK	1	
E45		VSC2131	HEAT SINK	1	
	■	VEP02321A	SERVO C.B.A.		INCLUDING THE
					FRAMING PACK (1)
					C.B.A. (VEP00G60A)
					FRAMING PACK (2)
					C.B.A. (VEP00G61A)
			CAPACITORS		
C201		ECUM1H151KCN	CHIP 50V 150P	1	
C202,03		ECUM1H331KBN	CHIP 50V 330P	2	
C204		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C251		ECUM1H100DCN	CHIP 50V 10P	1	
C252		ECUX1H390KCN	CHIP 50V 39P	1	
C253		ECUX1H561KBN	CHIP 50V 560P	1	
C254		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C255		ECUM1H331KBN	CHIP 50V 330P	1	
C256		ECEA1CKS330	E.CAPACITOR 16V 33U	1	
C2001,02		ECQB1H472JH	P.CAPACITOR 50V 4700P	2	
C2003,04		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C2005-08		ECCF1H680JC	C.CAPACITOR 50V 68P	4	
C2009,10		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C2011		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C2012		ECQM1H223JV	P.CAPACITOR 50V 0.022U	1	
C2013		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2014		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2015		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C2016		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2017		ECQM1H153JV	P.CAPACITOR 50V 0.015U	1	
C2018		ECEA50ZR33	E.CAPACITOR 50V 0.33U	1	
C2019-21		ECEA1HKN010	E.CAPACITOR 50V 1U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2022		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2023		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C2024		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2025,26		ECEA50ZR68	E.CAPACITOR 50V 0.68U	2	
C2027		ECEA50ZR33	E.CAPACITOR 50V 0.33U	1	
C2028		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2029,30		ECQM1H103JV	P.CAPACITOR 50V 0.01U	2	
C2031		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C2032,33		ECEA50ZR33	E.CAPACITOR 50V 0.33U	2	
C2034		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2035		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2036		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2037		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2038		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2039		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C2040		ECQM1H272JV	P.CAPACITOR 50V 2700P	1	
C2041		ECEA10V47T	E.CAPACITOR 10V	1	
C2042		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C2043		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C2044		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2045		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2046		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2047		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C2048		ECKF1H221KB	C.CAPACITOR 50V 220P	1	
C2049,50		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C2051		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2052		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2053		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2054		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2055		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2056		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C2057		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2058		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C2059		ECQM1H392JV	P.CAPACITOR 50V 3900P	1	
C2060		ECKF1H221KB	C.CAPACITOR 50V 220P	1	
C2061		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2062		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2063		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2064		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2065		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2066		ECQP1H103GZ	P.CAPACITOR 50V 0.01U	1	
C2068,69		ECQM1H683JV	P.CAPACITOR 50V 0.068U	2	
C2070		ECQP1H183GZ	P.CAPACITOR 50V 0.018U	1	
C2071		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2072		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C2073		ECQP1H104GZ	P.CAPACITOR 50V 0.1U	1	
C2074		ECQM1H563JV	P.CAPACITOR 50V 0.056U	1	
C2075		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2076		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C2077,78		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C2082		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2083		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C2085		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2086		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2087		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2088		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2089		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2090		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2091		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C2092-94		ECEA1HKN010	E.CAPACITOR 50V 1U	3	
C2095		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2096		ECEA1EK100	E.CAPACITOR 25V 10U	1	
C2097		ECQM1H683JV	P.CAPACITOR 50V 0.068U	1	
C2098		ECEA1EU101	E.CAPACITOR 25V 100U	1	
C2099		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2100		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2101		ECQM1H822JV	P.CAPACITOR 50V 8200P	1	
C2102-04		ECEA50ZR22	E.CAPACITOR 50V 0.22U	3	
C2105		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2106		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2107		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2108,09		ECQM1H562JV	P.CAPACITOR 50V 5600P	2	
C2110		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2111		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2112		ECEA1EKN3R3	ELECTROLYTIC 25V 3.3U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2113		ECKF1H471KB	C.CAPACITOR 50V 470P	1	
C2114		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C2115		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2116		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2117		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2118		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C2119		ECQM1H562JV	P.CAPACITOR 50V 5600P	1	
C2120		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2121		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2122		ECEA50MR68	E.CAPACITOR 50V 0.68U	1	
C2123		ECKF1H272KB	C.CAPACITOR 50V 2700P	1	
C2124		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2125		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2126		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2127		ECKF1H152KB	C.CAPACITOR 50V 1500P	1	
C2128		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2129		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2130		ECEA16V10T	E.CAPACITOR 16V	1	
C2131		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2132		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2133		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C2134		ECQM1H682JV	P.CAPACITOR 50V 6800P	1	
C2135		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2136.37		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2138		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C2139		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2140-55		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	16	
C2156		ECEA1CU331	E.CAPACITOR 16V 330U	1	
C2157-59		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C2160		ECEA1CU331	E.CAPACITOR 16V 330U	1	
C2161		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C2162		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2165		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C2166		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C2167-70		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C2171		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2172		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2173		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C2182		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2183		ECEA16V47T	E.CAPACITOR 16V	1	
C2184		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2185		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2187		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C2188		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2189		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2190		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2191		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C2192		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2193		ECKF1H472ZF	C.CAPACITOR 50V 4700P	1	
C2194		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C2195		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C2196		ECKF1H391KB	C.CAPACITOR 50V 390P	1	
C2197-99		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C2200		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C2201		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2202		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C2501,02		ECQM1H102JV	P.CAPACITOR 50V 1000P	2	
C2503		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2504		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2505		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2506		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C2507,08		ECQM1H102JV	P.CAPACITOR 50V 1000P	2	
C2510,11		ECQB1H123JH	P.CAPACITOR 50V 0.012U	2	
C2512		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2513,14		ECCF1H680JC	C.CAPACITOR 50V 68P	2	
C2515		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2516		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C2517		ECKF1H152KB	C.CAPACITOR 50V 1500P	1	
C2518		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2519		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C2520		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2521-24		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C2525		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C2526-30		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C2531		ECEA1CK470U	E.CAPACITOR 16V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2532-37		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	6	
C2551		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C2552		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C2553		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2554		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C2555		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C2556		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C2557		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C2558		ECQP1H104GZ	P.CAPACITOR 50V 0.1U	1	
C2559		ECQM1H563JV	P.CAPACITOR 50V 0.056U	1	
C2560		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2561		ECKF1H272KB	C.CAPACITOR 50V 2700P	1	
C2562		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2563		ECEA1HK010	E.CAPACITOR 50V 1U	1	
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D251-55		MA151A	DIODE	5	<R>
D2003-08		MA165	DIODE	6	<R>
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D2012-19		MA165	DIODE	8	<R>
D2032		RD6.2EB	ZENER 6.2V	1	<R>
D2040-45		MA165	DIODE	6	<R>
D2047-65		MA165	DIODE	19	<R>
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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
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L2001		VLQEL05F470K	COIL 47UH	1	
L2002		VLQEL06F102K	COIL 1UH	1	
L2004		VLQEL05F470K	COIL 47UH	1	
L2005,06		VLQEL06F102K	COIL 1UH	2	
L2501		VLQEL05F470K	COIL 47UH	1	
L2551		VLQEL05F221K	COIL 220UH	1	
P001		VJP1238T	CONNECTOR(MALE) 11P	1	
P2001		VJP1234T	CONNECTOR(MALE) 7P	1	
P2002		VJP1230T	CONNECTOR(MALE) 3P	1	
P2003		VJP1235T	CONNECTOR(MALE) 8P	1	
P2004		VJP1235R	CONNECTOR(MALE) 8P	1	
P2005		VJP1235T	CONNECTOR(MALE) 8P	1	
P2006		VJP1233T	CONNECTOR(MALE) 6P	1	
P2007		VJP1232T	CONNECTOR(MALE) 5P	1	
P2008		VJP1229T	CONNECTOR(MALE) 2P	1	
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P2012		VJP1230T	CONNECTOR(MALE) 3P	1	
P2013		VJP1229T	CONNECTOR(MALE) 2P	1	
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P2016		VJP1229T	CONNECTOR(MALE) 2P	1	
P2017		VJP1232T	CONNECTOR(MALE) 5P	1	
P2018		VJP1229T	CONNECTOR(MALE) 2P	1	
P2019		VJP1229	CONNECTOR(MALE) 2P	1	
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Q2001		2SC3811	TRANSISTOR	1	(Q,R)<R>
Q2002,03		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2005-08		2SB641	TRANSISTOR	4	(Q,R)<R>
Q2009		2SD636	TRANSISTOR	1	(Q,R)<R>
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Q2011,12		2SD636	TRANSISTOR	2	(Q,R)<R>
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Q2019-21		2SD1266	TRANSISTOR	3	(P,Q)<R>
Q2022-32		2SD636	TRANSISTOR	11	(Q,R)<R>
Q2033		2SB643	TRANSISTOR	1	(Q,R)<R>
Q2034		2SD638	TRANSISTOR	1	(Q,R)<R>
Q2035		2SD1266	TRANSISTOR	1	(P,Q)<R>
Q2036,37		2SB641	TRANSISTOR	2	(Q,R)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q2038		2SD636	TRANSISTOR	1	(Q,R)<R>
Q2039-41		2SB641	TRANSISTOR	3	(Q,R)<R>
Q2042,43		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2044,45		2SD889	TRANSISTOR	2	(P,Q,R)<R>
Q2046-48		2SD636	TRANSISTOR	3	(Q,R)<R>
Q2050,51		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2052,53		2SB641	TRANSISTOR	2	(Q,R)<R>
Q2054-56		2SD636	TRANSISTOR	3	(Q,R)<R>
Q2058		2SD636	TRANSISTOR	1	(Q,R)<R>
Q2061		2SB641	TRANSISTOR	1	(Q,R)<R>
Q2062		2SD1330	TRANSISTOR	1	(S,T)<R>
Q2063,64		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2501,02		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2551,52		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2553,54		2SD889	TRANSISTOR	2	(P,Q,R)<R>
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QR2017,18		UN1213	TRANSISTOR-RESISTOR	2	<R>
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R203		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R204		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R205		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R206		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R207		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R208		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R209		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R210		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R211,12		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R251		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R252		ERJ6GEYJ273	CHIP 1/10W 27K	1	
R253		ERJ6GEYJ224	CHIP 1/10W 220K	1	
R254-56		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R257		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R258		ERJ6GEYJ393	CHIP 1/10W 39K	1	
R259		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R260		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R261		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R2001		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2002		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2003-05		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2006		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2007		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2008		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2009,10		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2011		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2012		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2013,14		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2015		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2016		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2017		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2018		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2019		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2020,21		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2022		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2023		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2024		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2025,26		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2027		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2028,29		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2030,31		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R2032		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2033		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2034		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2035		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2036		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2037		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2038		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2039		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R2040		EROS2CKG6802	M.RESISTOR 1/4W 68K	1	
R2041		EROS2CKG1202	M.RESISTOR 1/4W 12K	1	
R2042		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2043,44		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2045		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2046		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2047		EROS2CKG5602	M.RESISTOR 1/4W 56K	1	
R2048		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R2049		EROS2CKG8200	M.RESISTOR 1/4W 820	1	
R2050		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2051		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2052		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2053,54		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2055		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2056		EROS2CKG4700	M.RESISTOR 1/4W 470	1	
R2057		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2058		ERG12ANJ820	M.RESISTOR 1/2W 82	1	
R2059		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2060		ERG12ANJ820	M.RESISTOR 1/2W 82	1	
R2061		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2062		ERG12ANJ820	M.RESISTOR 1/2W 82	1	
R2063~66		ERDS2TJ151	C.RESISTOR 1/4W 150	4	
R2067		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2068		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R2069		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2070		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R2071		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2072		ERX1SJ1R0	M.RESISTOR 1W 1.0	1	
R2073		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2074,75		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2076		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2077		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2078		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2079		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2080		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2081		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2082		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2083		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2084		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2085		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2086		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2087,88		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	2	
R2089		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2090		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2091		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2092		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2093		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R2094		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2095,96		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2097		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2098		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R2099		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2100		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2101		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2103		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2104		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2105		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2106		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2107		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2108		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2109		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R2110,11		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2112		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2113		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2114		ERDS2TJ394	C.RESISTOR 1/4W 390K	1	
R2115		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R2116		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2117		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2118		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2119		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2120		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R2121		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2122,23		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R2124		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2125		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2126		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2127,28		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2129,30		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2140		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2141		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2142		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2143		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R2144,45		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2146		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R2147		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2148		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2151		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2153,54		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2156		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2157		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2158		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R2159		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2160		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2161,62		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2163		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2165		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2168,69		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R2170,71		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R2172		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2173		EROS2CKG2403	M.RESISTOR 1/4W 240K	1	
R2174		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2175		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2176		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2177		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2178		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2179		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2180		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R2181		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2182,83		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2190		ERX12SJ1R0	M.RESISTOR 1/2W 1	1	
R2191-93		ERDS2TJ470	C.RESISTOR 1/4W 47	3	
R2194		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2195		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2196		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2197		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2198,99		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2200		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2201,02		ERDS2TJ154	C.RESISTOR 1/4W 150K	2	
R2203		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2204		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2205		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R2206		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2207		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2208		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2209		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2210,11		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2212		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2213		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2214		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2215,16		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R2217		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2218,19		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2220		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2221-23		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2224		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2225		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2226		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2227		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2230		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2231,32		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2233		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2234		ERD25TJ395	C.RESISTOR 1/4W 3.9M	1	
R2235		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2236		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2237		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2238		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2239		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2240,41		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R2242		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R2243,44		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2245		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2246		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2247		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2248,49		ERDS2TJ274	C.RESISTOR 1/4W 270K	2	
R2251		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2252		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2256		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2260		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2261		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2262		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2264		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2265,66		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2267		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2268		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2269		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R2270		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2275		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2276		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2277		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2278		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2279		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2280		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2281		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2282		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2283		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2284		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2286		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R2287		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2288,89		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2290		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2291		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2292		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2293		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2296,97		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R2300		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2302		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2303		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2304		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2305		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2306		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2307		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2308,09		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R2310		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2311		ERD25TJ395	C.RESISTOR 1/4W 3.9M	1	
R2312		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2313		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2314		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2315		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2316-18		ERDS2TJ224	C.RESISTOR 1/4W 220K	3	
R2319		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2320,21		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2322		ERDS2TJ270	C.RESISTOR 1/4W 27	1	
R2323		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2324		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2325-28		ERDS2TJ274	C.RESISTOR 1/4W 270K	4	
R2329		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2330		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2331		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2332		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2333		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2334		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2335,36		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R2337		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2338		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2339		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2340-42		ERDS2TJ104	C.RESISTOR 1/4W 100K	3	
R2343		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2344,45		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2357		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2358		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2359		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2363		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R2364,65		ERQ12HJ1R5	FUSE 1/2W 1.5	2	
R2367,68		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R2369		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R2370		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2371		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2372		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R2373		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2374		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2375		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2376		ERSB30J103	M.RESISTOR 10K	1	
R2378		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2379		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2380,81		ERDS2TJ105	C.RESISTOR 1/4W 1000K	2	
R2384		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2385		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2386,87		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2388		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2389		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2390		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R2391		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2392		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2393		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2394		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2395		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2396		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2397,98		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2399		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2400		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2401		ERDS2TJ395	C.RESISTOR 1/4W 3.9M	1	
R2402		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2403		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2404		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2405		EROS2CKG5102	M.RESISTOR 1/4W 51K	1	
R2501		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2502,03		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R2504		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2505,06		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2507		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2508		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2509		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2510		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2511		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2512		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R2513		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2514		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2515		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2516		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2517,18		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2521		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2522		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2523		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2524		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R2525		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2526		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2527		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2528-30		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2531		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2532		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2533		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2534		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2535		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2536		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2537		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2540		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2541		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2542		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2543		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2544		ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R2545		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2546		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2547		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2548		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2549		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2550		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R2551		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2552		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2553		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2554-56		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2557		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2558		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2559		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2560		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2561		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2563		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2564		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2565.66		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R2567		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2568		EROS2CKG2403	M.RESISTOR 1/4W 240K	1	
R2569		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2570		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2571		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2572		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2573		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R2574		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2575		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2576		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2577		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2578,79		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
RA2001,02		EXBP84103K	RESISTOR&RESISTOR 10K	2	
RA2003,04		EXBP87103K	RESISTOR&RESISTOR 10K	2	
VR2001		EVM38GA00B54	V.RESISTOR 50K	1	
VR2002		EVM38GA00B55	V.RESISTOR 500K	1	
VR2007,08		EVM38GA00B54	V.RESISTOR 50K	2	
VR2011		EVM38GA00B24	V.RESISTOR 20K	1	
X201		VSX0083	CRYSTAL OSCILLATOR	1	<R>
X2001,02		VSX0128	CRYSTAL OSCILLATOR	2	<R>
X2501		VSX0128	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E46		VSC0495	HEAT SINK	2	
E47		VMX1028	SUPPORT	2	
E48		VMX0985	SPACER	1	
E49		VKC0129	HINGE	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP02224E	REEL SERVO C.B.A.		INCLUDING THE REEL SUB C.B.A. (VEP00K07A)
			CAPACITORS		
C2701		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2702		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C2703		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2704		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2705		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2706		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2707		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C2708,09		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C2710		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2711		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2712		ECEA0JU102	E.CAPACITOR 6.3V 1000U	1	
C2713		ECQM1H563JV	P.CAPACITOR 50V 0.056U	1	
C2714		ECQM1H123JV	P.CAPACITOR 50V 0.012U	1	
C2715		ECEA1CKN220	E.CAPACITOR 16V 22U	1	
C2716		ECQM1H823JV	P.CAPACITOR 50V 0.082U	1	
C2717		ECQM1H222JV	P.CAPACITOR 50V 2200P	1	
C2718		ECEA1CKN220	E.CAPACITOR 16V 22U	1	
C2719		ECQM1H223JV	P.CAPACITOR 50V 0.022U	1	
C2720		ECQM1H222JV	P.CAPACITOR 50V 2200P	1	
C2721		ECEA1CN470S	E.CAPACITOR 16V 47U	1	
C2722		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2723		ECKF1H182KB	C.CAPACITOR 50V 1800P	1	
C2724		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2726		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C2727		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2728		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2729		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C2730		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2732		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C2733		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C2734		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2735		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C2736,37		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2738		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C2739		ECCF1H680KC	C.CAPACITOR 50V 68P	1	
C2740		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C2741		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2742,43		ECEA1CK101	E.CAPACITOR 16V 100U	2	
C2744,45		ECEA1EU331	E.CAPACITOR 25V 330U	2	
C2746,47		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2751,52		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2753		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2754		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C2755-60		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	6	
C2766		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2767		ECEA1VU470	E.CAPACITOR 35V 47U	1	
D2701-06		MA165	DIODE	6	<R>
D2707,08		ERA81004G	DIODE	2	<R>
D2709-17		MA165	DIODE	9	<R>
D2722,23		MA165	DIODE	2	<R>
D2729,30		MA165	DIODE	2	<R>
D2737,38		MA165	DIODE	2	<R>
D2741-43		MA165	DIODE	3	<R>
D2745,46		MA165	DIODE	2	<R>
D2747		MA4130M	DIODE	1	<R>
IC2701		UPC393C	IC	1	<R>
IC2702-05		UPC324C	IC	4	<R>
IC2706		UPC339C	IC	1	<R>
IC2707		UPC393C	IC	1	<R>
IC2708		UPD4030BC	IC	1	<R>
IC2709		UPD4069UBC	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC2710		UPD4030BC	IC	1	<R>
IC2711,12		UPD4066BC	IC	2	<R>
IC2714		UPC339C	IC	1	<R>
IC2715		UPC358C	IC	1	<R>
IC2716		UPD1511AC106	IC	1	<R>
IC2717		UPC393C	IC	1	<R>
L2701		VLQEL05F470K	COIL 47UH	1	
L2702		VLQEL06F221K	COIL 220UH	1	
L2704,05		VLT0193	TRANSFORMER	2	
P2700		VJP1233T	CONNECTOR(MALE) 6P	1	
P2701		VJP1231B	CONNECTOR(MALE) 4P	1	
P2702		VJP1231T	CONNECTOR(MALE) 4P	1	
P2703		VJP1233T	CONNECTOR(MALE) 6P	1	
P2704		VJP1231G	CONNECTOR(MALE) 4P	1	
P2705		VJP1231R	CONNECTOR(MALE) 4P	1	
P2706		VJP1247T	CONNECTOR(MALE) 7P	1	
Q2701		2SB641	TRANSISTOR	1	(Q,R)<R>
Q2702		2SC2497	TRANSISTOR	1	(Q,R)<R>
Q2703		2SA1096	TRANSISTOR	1	(Q,R)<R>
Q2704		2SB641	TRANSISTOR	1	(Q,R)<R>
Q2705		2SC2497	TRANSISTOR	1	(Q,R)<R>
Q2706		2SA1096	TRANSISTOR	1	(Q,R)<R>
Q2707,08		2SD636	TRANSISTOR	2	(Q,R)<R>
Q2709		2SC3811	TRANSISTOR	1	(Q,R)<R>
Q2710,11		2SD636	TRANSISTOR	2	(Q,R)<R>
QR2701,02		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR2704		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR2706		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR2708		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR2712,13		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR2715-26		UN1213	TRANSISTOR-RESISTOR	12	<R>
			RESISTORS		
R2701		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2702		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2703		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2704		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2705		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2706		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2707		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2708		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2709,10		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2711		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R2712		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2713		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2714		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2715		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2716		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2717		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2718		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2719,20		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2721		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R2722		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2723		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2724		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2725		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2726		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R2727		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2728-30		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2731		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2732		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2733		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2734		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2735		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2736		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2737,38		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R2739		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2740		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2741		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2742		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2743		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2744		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2745		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2746		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2747,48		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2749,50		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R2751		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2753		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2754		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2755		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R2756		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2757		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2758		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2759		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2760		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2761		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2762		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2763		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2764		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2766		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2767,68		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R2770		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2771		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2773		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2774,75		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2776		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2777		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2778,79		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2780		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2785		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2786		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2787		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2788		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2789		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2790		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2791-93		ERDS2TJ223	C.RESISTOR 1/4W 22K	3	
R2794		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2795		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2798,99		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R2800,01		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R2802		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2804-06		ERDS2TJ104	C.RESISTOR 1/4W 100K	3	
R2807,08		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2809		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R2810,11		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2813		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2814		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2815		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2816		ERX1ANJ1R2	M.RESISTOR 1W 1.2	1	
R2817,18		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2820		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2821		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2822		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2823		ERX1ANJ1R2	M.RESISTOR 1W 1.2	1	
R2824		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2827		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2828		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2830		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2831		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2832		EROS2CKG1102	M.RESISTOR 1/4W 11K	1	
R2834		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2835		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2836		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2837		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2838		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2842		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2843		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2845		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2846		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2850		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2853-55		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2856		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2857,58		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R2859,60		ERDS2TJ183	C.RESISTOR 1/4W 18K	2	
R2861		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2869		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2870,71		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2875		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2877-85		ERDS2TJ103	C.RESISTOR 1/4W 10K	9	
R2890		ERX1ANJR33	M.RESISTOR 1W 0.33	1	
R2891,92		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R2893		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2894		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2895.96		ERDS2TJ105	C.RESISTOR 1/4W 1000K	2	
R2897.98		ERDS2TJ274	C.RESISTOR 1/4W 270K	2	
X2701		VSX0128	CRYSTAL OSCILLATOR	1	<R>
	■	VEP03557A	VIDEO C.B.A.		INCLUDING THE
					VIDEO METER PACK
					C.B.A. (VEP00J21A)
			CAPACITORS		
C3043,44		ECQB1H103JH	P.CAPACITOR 50V 0.01U	2	
C3045		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C3048		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C3049		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C3204		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C30001		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30002		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30003		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30004,05		ECEA1CN470S	E.CAPACITOR 16V 47U	2	
C30006		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30007		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30008		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30009		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30010		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30011		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30012		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30013		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C30014		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30015		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30016		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C30017		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30018-20		ECEA1CK470U	E.CAPACITOR 16V 47U	3	
C30021		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30022		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C30023		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C30024		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30025		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30026		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30027		ECEA0JK331	E.CAPACITOR 6.3V 330U	1	
C30028		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C30029		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C30030		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30031		VCCF1H271GC	C.CAPACITOR 50V 270P	1	
C30032		VCCF1H820GC	C.CAPACITOR 50V 82P	1	
C30033		VCCF1H271GC	C.CAPACITOR 50V 270P	1	
C30034,35		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	2	
C30036		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30037		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C30038		ECEA1CN470S	E.CAPACITOR 16V 47U	1	
C30039		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C30040		ECEA0JSS222	E.CAPACITOR 6.3V 2200U	1	
C30041		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C30042		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30043		ECQP1H102GZ	P.CAPACITOR 50V 1000P	1	
C30044		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30045		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30046,47		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C30048		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30049		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C30050		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30051		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30052		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30053		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30054		ECCF1H271JC	C.CAPACITOR 50V 270P	1	
C30055		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30056		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30057,58		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30059		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30060,61		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30062		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30063		ECKF1H181KB	C.CAPACITOR 50V 1800P	1	
C30064		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30065		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30066		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30067		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30068		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30069		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30070-72		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30073		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30074		ECKF1H221KB	C.CAPACITOR 50V 220P	1	
C30075		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C30076		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30077		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30078-80		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30081		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30082		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30083,84		ECEA1CK470U	E.CAPACITOR 16V 47U	2	
C30085		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30086		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30087		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30088		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C30089-91		ECEA1CK330U	E.CAPACITOR 16V 33U	3	
C30092		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30093		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30094		ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
C30201-03		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30204		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30205		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C30206		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C30207		ECQP1H821GZ	P.CAPACITOR 50V 820P	1	
C30208		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30209,10		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30211		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30212,13		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30215		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30218		ECEA1CN470S	E.CAPACITOR 16V 47U	1	
C30219		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30220		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30221,22		ECCF1H220JC	C.CAPACITOR 50V 22P	2	
C30223		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C30224		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30225		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30226-28		ECEA1HK010	E.CAPACITOR 50V 1U	3	
C30229		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C30230		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30231,32		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C30236		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30237		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C30238		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C30239		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30240		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30241		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30242		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30243		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C30244		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C30245,46		ECCF1H270JC	C.CAPACITOR 50V 27P	2	
C30247		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30248		ECEA0JK331	E.CAPACITOR 6.3V 330U	1	
C30249,50		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30251		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30252		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30253		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C30254		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30255		ECQB1H562JH	P.CAPACITOR 50V 5600P	1	
C30256,57		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C30258		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30259		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30260		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C30261		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30262		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C30263		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30264		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30265		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30266,67		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C30268,69		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30270		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C30271		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C30272		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C30273		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30274		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C30275,76		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C30277		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C30278		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30279		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30280		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30281		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30282		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30283		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30284		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30285		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30286		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30287		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C30288-90		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30291		ECCF1H180JC	C.CAPACITOR 50V 18P	1	
C30292		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C30293-95		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30296		ECQP1H471JZ	P.CAPACITOR 50V 470P	1	
C30297		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30298		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30299		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C30300		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30301,02		ECEA1ASS102	E.CAPACITOR 10V 1000U	2	
C30303		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30304		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30305		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C30306		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30307,08		ECEA1ASS102	E.CAPACITOR 10V 1000U	2	
C30309		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30310		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30311		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30312		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C30313		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30314		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30315		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C30316		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C30317		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30318		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30319		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C30320		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30321		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30323,24		ECEA1CN101S	E.CAPACITOR 16V 100U	2	
C30325		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30326		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30327		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C30337		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C30338		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30340		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C30341		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30342-48		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	7	
C30349		ECCF1H390JC	C.CAPACITOR 50V 39P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C30350,51		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30352		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30353		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30354		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C30355		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30356		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C30362		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30364		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30365		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30366		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C30367		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30368		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C30369		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30370		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30371		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C30372		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30373		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C30374		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30375		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C30376		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30377		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30378		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30379		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30381-85		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C30386		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30387		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30388		VCCF1H271GC	C.CAPACITOR 50V 270P	1	
C30389		VCCF1H820GC	C.CAPACITOR 50V 82P	1	
C30390		VCCF1H271GC	C.CAPACITOR 50V 270P	1	
C30391		ECEA0JSS102	E.CAPACITOR 6.3V 1000U	1	
C30392		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30393		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C30394,95		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C30396		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30397		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C30398		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30399		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C30400-03		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C30404		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30405		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30408		ECCF1H221JC	C.CAPACITOR 50V 220P	1	
C30409		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30410		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30411		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30412		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C30414		VCKD1H431JA	C.CAPACITOR 50V 430P	1	
C30415		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30416		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30417,18		ECEA0JK330	E.CAPACITOR 6.3V 33U	2	
C30419		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30420		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30422,23		ECEA1CK470U	E.CAPACITOR 16V 47U	2	
C30425		ECKF1H181KB	C.CAPACITOR 50V 1800P	1	
C30428		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30429		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C30430		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C30431		ECEA0JK331	E.CAPACITOR 6.3V 330U	1	
C30433		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30434		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C30435		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30437,38		ECEA1CK220	E.CAPACITOR 16V 22U	2	
C30441		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30442		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C30443		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30444		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C30445		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C30447		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30448		ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
D3016		MA165	DIODE	1	<R>
D3023		MA165	DIODE	1	<R>
D3026		MA165	DIODE	1	<R>
D30001,02		MA165	DIODE	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D30051-54		MA165	DIODE	4	<R>
D30055		MA4091	DIODE	1	<R>
D30056		MA165	DIODE	1	<R>
D30060,61		MA165	DIODE	2	<R>
D30062		1SS99	DIODE	1	<R>
DL30001		ELB5G046	FILTER	1	
DL30002		VLD0153	DELAY	1	
DL30003		VLD0123	DELAY	1	
DL30051		VLD0089	DELAY	1	
DL30054		VLD0153	DELAY	1	
DL30056		VLD0125	DELAY LINE	1	
FL30001,02		VLF0639	FILTER	2	
FL30003		ELB4M022	FILTER	1	
FL30051		VLD0123	DELAY	1	
FL30052		VLF0639	FILTER	1	
FL30053		VLF0499	FILTER	1	
FL30054		ELB4M022	FILTER	1	
FL30055		VLF0063	FILTER	1	
FL30056		VLF0567	FILTER	1	
FL30057		VLF0523	FILTER	1	
FL30058		VLF0568	FILTER	1	
FL30059		ELXTS470GA	FILTER	1	
FL30060		ELB4R033	FILTER	1	
IC3009		UPC324C	IC	1	<R>
IC3010		UPD4066BC	IC	1	<R>
IC30001		VEFH03D	HIC	1	<R>
IC30002		VC2031DP	IC	1	<R>
IC30003		AN6306	IC	1	<R>
IC30004		MN74HC221	IC	1	<R>
IC30006.07		BA7001	IC	2	<R>
IC30051		UPD4053BC	IC	1	<R>
IC30052		AN3321K	IC	1	<R>
IC30053		VC2031DP	IC	1	<R>
IC30054		M51647SP	IC	1	<R>
IC30055		VEFH03D	HIC	1	<R>
IC30056,57		BA7001	IC	2	<R>
IC30058		MSM6965-3RS	IC	1	<R>
IC30059		AN3494NK	IC	1	<R>
IC30060		MN3106	IC	1	<R>
IC30061		MN3802A	IC	1	<R>
IC30062		AN3211K	IC	1	<R>
IC30063,64		BA7001	IC	2	<R>
IC30065		TA7348P	IC	1	<R>
L3008		VLQEL05F221K	COIL 220UH	1	
L3008		VLQEL05F221K	COIL 220UH	1	
L30001-05		VLQEL05F101K	COIL 100UH	5	
L30006		VLQEL05F220K	COIL 22UH	1	
L30007-10		VLQEL05F101K	COIL 100UH	4	
L30011		VLQEL05F820K	COIL 82UH	1	
L30012		VLQEL05F101K	COIL 100UH	1	
L30013		VLQEL05R271J	COIL 270UH	1	
L30014		VLQEL05F101K	COIL 100UH	1	
L30015		VLQEL05F151K	COIL 150UH	1	
L30016		VLQEL06F5R6J	COIL 56UH	1	
L30051-54		VLQEL05F101K	COIL 100UH	4	
L30055,56		VLQEL05F560K	COIL 56UH	2	
L30057		VLQEL05F101K	COIL 100UH	1	
L30058		VLQEL05F121J	COIL 120UH	1	
L30059		VLQEL05F151K	COIL 150UH	1	
L30060,61		VLQEL05F101K	COIL 100UH	2	
L30062		VLQEL05F220K	COIL 22UH	1	
L30063,64		VLQEL05F101K	COIL 100UH	2	
L30065,66		VLQEL05F150K	COIL 15UH	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L30067-75		VLQEL05F101K	COIL 100UH	9	
L30077		VLQEL05F101K	COIL 100UH	1	
L30078		VLQEL05F560K	COIL 56UH	1	
L30079		VLQEL05F101K	COIL 100UH	1	
L30082-84		VLQEL05F101K	COIL 100UH	3	
L30085		VLQEL05F180K	COIL 18UH	1	
L30086		VLQEL05F151K	COIL 150UH	1	
P3008		VJP1511T	CONNECTOR(MALE)	1	
P30001		VJP1232T	CONNECTOR(MALE) 5P	1	
P30002		VJP1233T	CONNECTOR(MALE) 6P	1	
P30003		VJP1229T	CONNECTOR(MALE) 2P	1	
P30004		VJP1236T	CONNECTOR(MALE) 9P	1	
P30005		VJP1237T	CONNECTOR(MALE) 10P	1	
P30006,07		VJP1235T	CONNECTOR(MALE) 8P	2	
P30009		VJP1230T	CONNECTOR(MALE) 3P	1	
P30010		VJP1229	CONNECTOR(MALE) 2P	1	
P30011,12		VJP1234T	CONNECTOR(MALE) 7P	2	
P30013		VJP1229T	CONNECTOR(MALE) 2P	1	
P30014		VJP1229	CONNECTOR(MALE) 2P	1	
P30015,16		VJP1231T	CONNECTOR(MALE) 4P	2	
P30017		VJP1229T	CONNECTOR(MALE) 2P	1	
Q3010		2SD636	TRANSISTOR	1	(Q,R)<R>
Q3011		2SB641	TRANSISTOR	1	(Q,R)<R>
Q30001		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30002,03		2SA1254	TRANSISTOR	2	<R>
Q30004		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30005,06		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30007		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30008-10		2SD636	TRANSISTOR	3	(Q,R,S)<R>
Q30011		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30012		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30013		2SA1254	TRANSISTOR	1	<R>
Q30014		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30015		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30016		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30017		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30018		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30019		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30020-22		2SB641	TRANSISTOR	3	(Q,R,S)<R>
Q30023,24		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30025		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30026		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30027		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30028-34		2SD636	TRANSISTOR	7	(Q,R,S)<R>
Q30051,52		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30053		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30054		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30055		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30056		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30057		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30061,62		2SB641	TRANSISTOR	2	(Q,R,S)<R>
Q30063		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30064,65		2SC2206	TRANSISTOR	2	(B,C)<R>
Q30066		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30067		2SD639	TRANSISTOR	1	(Q,R,S)<R>
Q30068		2SB643	TRANSISTOR	1	(Q,R,S)<R>
Q30069		2SD639	TRANSISTOR	1	(Q,R,S)<R>
Q30070		2SB643	TRANSISTOR	1	(Q,R,S)<R>
Q30071-76		2SD636	TRANSISTOR	6	(Q,R,S)<R>
Q30077,78		2SB641	TRANSISTOR	2	(Q,R,S)<R>
Q30079		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30081		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30082		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30086		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30087,88		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30089		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30090,91		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30092		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30093		2SC2206	TRANSISTOR	1	(B,C)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q30094-96		2SD636	TRANSISTOR	3	(Q,R,S)<R>
Q30099		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30100		2SA1254	TRANSISTOR	1	<R>
Q30101		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30102		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30103		2SB641	TRANSISTOR	1	(Q,R,S)<R>
QR3009		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR3010		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR3012		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR30001-06		UN1213	TRANSISTOR-RESISTOR	6	<R>
QR30007		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30008		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR30009		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30010-13		UN1213	TRANSISTOR-RESISTOR	4	<R>
QR30051		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30052		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR30053		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR30055-57		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR30058		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR30059		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR30062,63		UN1213	TRANSISTOR-RESISTOR	2	<R>
			RESISTORS		
R3061		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3062		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R3063,64		ERDS2TJ105	C.RESISTOR 1/4W 1000K	2	
R3065		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3066		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R3067		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R3068		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R3069		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R3070		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3071		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R3072		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R3073		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3074		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R3075		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3342		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30001		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30002		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30003		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30004,05		ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R30006,07		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30008		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30009,10		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30011		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R30012		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30013		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30014-17		ERDS2TJ102	C.RESISTOR 1/4W 1K	4	
R30018		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30019		ERDS2TJ820	C.RESISTOR 1/4W 82	1	
R30020		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30021		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30022		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30023,24		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	2	
R30025		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30026		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30027,28		ERDS2TJ681	C.RESISTOR 1/4W 680	2	
R30029		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30030		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30031		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30032		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30033		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30034		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30035		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30036-38		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30039		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30040		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30041		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30042		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30043		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R30044		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R30045-49		ERDS2TJ102	C.RESISTOR 1/4W 1K	5	
R30050		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R30051,52		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30053		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30054		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R30055		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R30056		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30057		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30058		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30059		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30060		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30061-63		EROS2CKG1001	M.RESISTOR 1/4W 1K	3	
R30064		EROS2CKG4700	M.RESISTOR 1/4W 470	1	
R30065		EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R30066		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R30067		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30068		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30070		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30071,72		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30073		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30075		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30076		ERDS2TJ334	C.RESISTOR 1/4W 330K	1	
R30077		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30078		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R30079		EROS2CKG2200	M.RESISTOR 1/4W 220	1	
R30080		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R30081		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30082,83		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30085		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30086		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R30087,88		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30089		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30090		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30091		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R30092		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30093		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30094		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30095		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30096		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R30097		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30098		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30099		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30100		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30101-03		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30104		ERDS2TJ820	C.RESISTOR 1/4W 82	1	
R30105,06		ERDS2TJ681	C.RESISTOR 1/4W 680	2	
R30107		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R30108		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30109		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30110		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30111		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30112		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30113		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30114		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30115		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R30116		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30117		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30118		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30119		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30120-22		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30123		ERDS2TJ820	C.RESISTOR 1/4W 82	1	
R30124		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30125		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30126,27		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30128		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30129		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30130		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30131		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30132		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30133		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30134		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30135		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30136		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30137		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30138		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R30139		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30140		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30141		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30142		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30143		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30144		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30145		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30146		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30147		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30148,49		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30150		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30151		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R30152		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30154,55		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R30156		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R30157		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30158,59		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R30201,02		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	2	
R30203,04		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30205		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30206		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30207		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30208		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R30209		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30210		EROS2CKG1201	M.RESISTOR 1/4W 1.2K	1	
R30211		EROS2CKG2700	M.RESISTOR 1/4W 270	1	
R30212		EROS2CKG1201	M.RESISTOR 1/4W 1.2K	1	
R30213		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30214		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30215		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30216		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30217		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30218		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R30219		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30220		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30222		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30223		EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R30224		EROS2CKG4700	M.RESISTOR 1/4W 470	1	
R30225,26		EROS2CKG1001	M.RESISTOR 1/4W 1K	2	
R30227		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R30228,29		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30231		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30232		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30233-35		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R30236		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30237		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30238		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30239,40		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30241,42		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30243		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30244,45		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30246		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30247		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30252		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30253		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R30254,55		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30256,57		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	2	
R30258		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30259		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30260		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30261		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30262		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30263		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30264		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R30265-68		ERDS2TJ102	C.RESISTOR 1/4W 1K	4	
R30269		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R30270		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R30271		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30272		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30273		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30274		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R30275		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30276		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30277,78		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30279		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R30280		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30281		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30282		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30283		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30284		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30285		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30286		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30287		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R30288		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30289,90		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30291,92		ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R30293		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30294		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30295		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30296		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30297		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30298		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30299		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30300		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30301		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30302		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30303		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30304		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30305		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30306		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30307		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30308		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30309		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30310		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30311		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R30312		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30313		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30314		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30315		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30316		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30317		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30318		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R30319		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30320		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30321		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30322,23		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R30324		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30325		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30326-31		ERDS2TJ102	C.RESISTOR 1/4W 1K	6	
R30332		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30333		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30334		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30335		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30336,37		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30338-40		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30341		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30342		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R30343,44		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30345		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R30346,47		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30348,49		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30350		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30351		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30352		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30353		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30356		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30357		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30358,59		ERDS2TJ273	C.RESISTOR 1/4W 27K	2	
R30360		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30361		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30362		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30363		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30364		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30373		EROS2CKG5601	M.RESISTOR 1/4W 5.6K	1	
R30374		EROS2CKG1502	M.RESISTOR 1/4W 15K	1	
R30375		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30377		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30378		ERDS2TJ330	C.RESISTOR 1/4W 33	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30379,80		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R30381		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30382-85		ERDS2TJ102	C.RESISTOR 1/4W 1K	4	
R30388		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30389		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30390		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30391		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30392		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30393,94		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30395		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30396		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30399		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30400		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R30401		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30402		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30403		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30405		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30413		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30414		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30415		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30416		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R30417		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30418		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30419		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30423,24		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R30425		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30427		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30428		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30429		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30430		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30431		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30432		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30433		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30436		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30437		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30438		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30439		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30440		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R30442		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R30443		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30444		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30445		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30449		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30450		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R30451		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30452		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30455		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30456		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R30457		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
TH30001,02		ERTD2FHL202S	THERMISTOR 2KS	2	
VR30001		EVM38GA00B23	V.RESISTOR 2K	1	
VR30002,03		EVM38GA00B13	V.RESISTOR 1K	2	
VR30004		EVM38GA00B23	V.RESISTOR 2K	1	
VR30005-08		EVM38GA00B53	V.RESISTOR 5K	4	
VR30009,10		EVM38GA00B13	V.RESISTOR 1K	2	
VR30011,12		EVM38GA00B14	V.RESISTOR 10K	2	
VR30051		EVM38GA00B23	V.RESISTOR 2K	1	
VR30052		EVM38GA00B14	V.RESISTOR 10K	1	
VR30053		EVM38GA00B23	V.RESISTOR 2K	1	
VR30055		EVM38GA00B23	V.RESISTOR 2K	1	
VR30056		EVTK8CA00B14	V.RESISTOR 10K	1	
VR30057,58		EVM38GA00B14	V.RESISTOR 10K	2	
VR30059		EVM58GA00B52	V.RESISTOR 500	1	
VR30060		EVM38GA00B13	V.RESISTOR 1K	1	
VR30061-63		EVM38GA00B23	V.RESISTOR 2K	3	
VR30064		EVM38GA00B24	V.RESISTOR 20K	1	
VR30067		EVM38GA00B13	V.RESISTOR 1K	1	
VR30068		EVM38GA00B23	V.RESISTOR 2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X30001		VSX0225	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E50		VSC2106	SHIELD CASE (UPPER)	1	
E51		VSC2107	SHIELD CASE (MIDDLE)	1	
E52		VSC2108	SHIELD CASE (LOWER)	1	
E53		VMX0985	P.B.C. SPACER	1	
	■	VEP03558A	SUB VIDEO C.B.A.		
			CAPACITORS		
C31001		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C31002-04		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C31005		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C31006		ECCF1H150JC	C.CAPACITOR 50V 15P	1	
C31009		ECCF1H120JC	C.CAPACITOR 50V 12P	1	
C31010		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C31011		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31012		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C31013,14		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C31015		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C31016		ECCF1H181JC	C.CAPACITOR 50V 180P	1	
C31017-23		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	7	
C31024		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C31025		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31026		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C31028,29		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C31030		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C31031,32		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C31033		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31034		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C31038		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C31039		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31040		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C31041		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C31042		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C31043		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31044		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C31045		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C31046		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31047		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C31048		ECCF1H120JC	C.CAPACITOR 50V 12P	1	
C31049		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C31050		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31051,52		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C31053		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C31054		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C31055,56		ECCF1H151JC	C.CAPACITOR 50V 150P	2	
C31057		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C31058,59		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C31060		ECEA1CK100	E.CAPACITOR 16V 10U	1	
DL31001		ELB4Q053	FILTER	1	
DL31002		ELB4R031	FILTER	1	
IC31001		M52054SP	IC	1	<R>
IC31002		MN4053B	IC	1	<R>
IC31003		VCR0188	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L31001		VLQEL05F101K	COIL 100UH	1	
L31002		VLQEL05F121K	COIL 120UH	1	
L31003		VLQEL05F120K	COIL 12UH	1	
L31004		VLQEL05F101K	COIL 100UH	1	
L31005		VLQEL05F150K	COIL 15UH	1	
L31006		VLQEL05F391J	COIL 390UH	1	
L31007		VLQEL05F121K	COIL 120UH	1	
L31008		VLQEL05F101K	COIL 100UH	1	
L31009		VLQEL05F100K	COIL 10UH	1	
L31010,11		VLQEL05F180K	COIL 18UH	2	
L31012		VLQEL05F121K	COIL 120UH	1	
L31013		VLQEL05F101K	COIL 100UH	1	
L31014		VLQEL05F560K	COIL 56UH	1	
L31015		VLQEL05F470K	COIL 47UH	1	
L31016		VLQEL05F100K	COIL 10UH	1	
L31017		VLQEL05F6R8K	COIL 6.8UH	1	
L31018		VLQEL05F151J	COIL 150UH	1	
L31019		VLQEL05F100K	COIL 10UH	1	
P31001		VJP1235T	CONNECTOR(MALE) 8P	1	
P31002		VJP1235R	CONNECTOR(MALE) 6P	1	
P31003		VJP1236T	CONNECTOR(MALE) 9P	1	
P31004,05		VJP1229T	CONNECTOR(MALE) 2P	2	
P31006,07		VJP1229	CONNECTOR(MALE) 2P	2	
Q31001		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31002		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31003-06		2SD636	TRANSISTOR	4	(Q,R,S)<R>
Q31007		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31008		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31009		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31010		2SD639	TRANSISTOR	1	(Q,R,S)<R>
Q31011		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31013,14		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q31015,16		2SC2206	TRANSISTOR	2	(B,C)<R>
Q31018,19		2SC2206	TRANSISTOR	2	(B,C)<R>
Q31020		2SD636	TRANSISTOR	1	(Q,R,S)<R>
QR31001-03		UN1212	TRANSISTOR-RESISTOR	3	<R>
QR31004		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR31006		UN1111	TRANSISTOR-RESISTOR	1	<R>
QR31007		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR31008-10		UN1213	TRANSISTOR-RESISTOR	3	<R>
			RESISTORS		
R31001		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31003		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31004		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31005		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31006-09		ERDS2TJ333	C.RESISTOR 1/4W 33K	4	
R31010		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31011,12		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31013		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R31014		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31015		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R31016,17		ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R31018		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R31020		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31021		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R31022		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R31023		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31024		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R31025		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31026		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31027		ERDS2TJ151	C.RESISTOR 1/4W 150	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R31028		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R31029		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31030		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R31031		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R31032		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31033		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R31034		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R31037,38		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31039		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31040		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31041		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31042		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31043		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R31044		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31045		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31046		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31047,48		ERDS2TJ561	C.RESISTOR 1/4W 560	2	
R31049,50		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31051		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31052		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31053		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R31054		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31055		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31057		ERDS2TJ220	C.RESISTOR 1/4W 22	1	
R31058		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R31059		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R31060		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R31061		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R31062		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31063		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31064		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31065		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31066		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R31067		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R31068,69		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R31070		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31071		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R31072		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R31073		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31074		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31075		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31076		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R31077		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
VR31001		EVM38GA00B23	V.RESISTOR 2K	1	
VR31002,03		EVM38GA00B22	V.RESISTOR 200	2	
VR31004		EVM38GA00B13	V.RESISTOR 1K	1	
VR31005		EVM38GA00B23	V.RESISTOR 2K	1	
VR31006		EVM38GA00B24	V.RESISTOR 20K	1	
VR31007-11		EVM38GA00B14	V.RESISTOR 10K	5	
	■	VEP03559A	Y/C SEPARATION C.B.A.		
			CAPACITORS		
C32001		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32002		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32003		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C32004		ECEA1AN101S	E.CAPACITOR 10V 100U	1	
C32006		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C32007		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C32008		ECKF1H271KB	C.CAPACITOR 50V 270P	1	
C32009		ECEA0JN101S	E.CAPACITOR 6.3V 100U	1	
C32010,11		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C32012,13		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32014		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C32015		ECCF1H121KC	C.CAPACITOR 50V 120P	1	
C32016		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C32017		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C32018		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32019		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32020		ECCF1H470KC	C.CAPACITOR 50V 47P	1	
C32021		ECKF1H271KB	C.CAPACITOR 50V 270P	1	
C32022		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C32023		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32024		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32025		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C32026		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C32027		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32028		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32029		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C32030		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C32031		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32032		ECQM1H272JV	P.CAPACITOR 50V 2700P	1	
C32033		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C32034,35		ECCF1H121KC	C.CAPACITOR 50V 120P	2	
C32036		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32037		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C32038		ECCF1H121KC	C.CAPACITOR 50V 120P	1	
C32039		ECEA0JN101S	E.CAPACITOR 6.3V 100U	1	
C32040		ECCF1H680KC	C.CAPACITOR 50V 68P	1	
C32042		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C32043		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C32044		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32045		ECCF1H270KC	C.CAPACITOR 50V 27P	1	
C32046		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C32047,48		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32049,50		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C32051-53		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C32054		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32055		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32056		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32057		ECCF1H270KC	C.CAPACITOR 50V 27P	1	
C32058		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32059		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C32060		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C32061		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32062		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C32063,64		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32065		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C32066-72		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	7	
C32073		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C32074		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C32075		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32076		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32077-80		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C32082		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C32083-90		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	8	
C32091		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32092-09		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	18	
C32110		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32111,12		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32113		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32114-22		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	9	
C32123,24		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C32125-29		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C32130		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C32131		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32132		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32133-35		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C32136		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C32137		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32138		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C32139,40		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32142		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32143		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C32144,45		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C32146		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C32147		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C32148		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32149,50		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C32151		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32152		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C32153,54		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C32155		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C32156		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C32157-61		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C32162		ECCF1H470KC	C.CAPACITOR 50V 47P	1	
C32163,64		ECCF1H100DC	C.CAPACITOR 50V 10P	2	
C32165		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
D32001-04		MA165	DIODE	4	<R>
D32005		MA4047	DIODE	1	<R>
D32006		MA165	DIODE	1	<R>
D32007		MA4051L	DIODE	1	<R>
FL32001		VLF0639	FILTER	1	
FL32002,03		VLF0581	FILTER	2	
IC32001		TA7348P	IC	1	<R>
IC32002		AN6306S	IC	1	<R>
IC32003		UPC319G	IC	1	<R>
IC32004		HA19211MP	IC	1	<R>
IC32005		MB40778P	IC	1	<R>
IC32006,07		MN74HC221S	IC	2	<R>
IC32008		AN612	IC	1	<R>
IC32009		NJM082BM	IC	1	<R>
IC32010		UPC358G	IC	1	<R>
IC32011		MN4528BS	IC	1	<R>
IC32012		NJM082BM	IC	1	<R>
IC32013		NJM4556MB	IC	1	<R>
IC32014		MN74HC74S	IC	1	<R>
IC32015		MN74HC08S	IC	1	<R>
IC32016,17		MN4053BS	IC	2	<R>
IC32018-20		UPD42505C-50	IC	3	<R>
IC32021		UPD65022G046	IC	1	<R>
IC32022		UPD65042G024	IC	1	<R>
IC32023-28		MN74HC161S	IC	6	<R>
IC32029		MN74HC32S	IC	1	<R>
IC32030		MB40778P	IC	1	<R>
IC32031		MN74HC74S	IC	1	<R>
IC32032		MN74HC240S	IC	1	<R>
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IC32034		MN74HC574S	IC	1	<R>
IC32035-39		MN74HC157S	IC	5	<R>
IC32040		MN74HC08S	IC	1	<R>
IC32041		MN74HC04S	IC	1	<R>
IC32042		MN4053BS	IC	1	<R>
IC32043		NJM082BM	IC	1	<R>
IC32044		AN78L05	IC	1	<R>
IC32045		MN74HC574S	IC	1	<R>
L32001		VLQEL05F101K	COIL 100UH	1	
L32002		VLQEL05F121K	COIL 120UH	1	
L32003		VLQEL05F101K	COIL 100UH	1	
L32004		VLQEL05F821K	COIL 820UH	1	
L32006		VLQEL05F121K	COIL 120UH	1	
L32007		VLQEL05F101K	COIL 100UH	1	
L32008		VLQEL05F470K	COIL 47UH	1	
L32009,10		VLQEL05F2R2K	COIL 2.2UH	2	
L32011		VLQEL05F101K	COIL 100UH	1	
L32013		VLQEL05F101K	COIL 100UH	1	
L32014,15		VLQEL05F221K	COIL 220UH	2	
L32016-19		VLQEL05F121K	COIL 120UH	4	
L32020		VLQEL05F101K	COIL 100UH	1	
L32021,22		VLQEL05F121K	COIL 120UH	2	
L32023		VLQEL05F101K	COIL 100UH	1	
L32024		VLQ0199	COIL	1	
L32026		VLQEL05F470K	COIL 47UH	1	
L32027		VLQEL05F181K	COIL 180UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L32028		VLQEL05F121K	COIL 120UH	1	
L32029		VLP0017	COIL	1	
P32001		VJP1233T	CONNECTOR(MALE) 6P	1	
P32002		VJP1232T	CONNECTOR(MALE) 5P	1	
P32003		VJP1231T	CONNECTOR(MALE) 4P	1	
P32004		VJP1235T	CONNECTOR(MALE) 8P	1	
P32005		VJP1229	CONNECTOR(MALE) 2P	1	
P32006		VJP1230T	CONNECTOR(MALE) 3P	1	
P32007		VJP1231R	CONNECTOR(MALE) 4P	1	
P32008		VJP1232G	CONNECTOR(MALE) 5P	1	
P32009		VJP1230R	CONNECTOR(MALE) 3P	1	
P32010		VJP1231G	CONNECTOR(MALE) 4P	1	
P32011		VJP1229T	CONNECTOR(MALE) 2P	1	
Q32002-06		2SD636	TRANSISTOR	5	(Q,R,S)<R>
Q32007		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32010,11		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q32012		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32013,14		2SC2206	TRANSISTOR	2	(B,C)<R>
Q32015		2SA1254	TRANSISTOR	1	<R.
Q32016		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q32017		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32018		2SK128	TRANSISTOR	1	(Q,R)<R>
Q32019-23		2SD636	TRANSISTOR	5	(Q,R,S)<R>
Q32024		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32025		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q32026		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32027,28		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q32029		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32030		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q32031		2SB641	TRANSISTOR	1	(Q,R,S)<R>
QR32001,02		UN1213	TRANSISTOR-RESISTOR	2	<R>
			RESISTORS		
R32001		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R32002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R32003,04		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R32005,06		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32007		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R32008		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R32009		EROS2CKG3300	M.RESISTOR 1/4W 330	1	
R32010		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R32011		ERDS2TJ220	C.RESISTOR 1/4W 22	1	
R32012		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R32013		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32014		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R32015		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R32016		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R32017,18		EROS2CKG1001	M.RESISTOR 1/4W 1K	2	
R32019		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R32020		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32021		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R32022		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32023		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R32024		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R32025,26		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R32027		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32028		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R32029		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R32030		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R32031		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32032		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R32033		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R32034		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R32035		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R32036		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R32037		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R32038		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R32039		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R32040		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32041,42		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R32043		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R32044,45		ERDS2TJ393	C.RESISTOR 1/4W 39K	2	
R32046		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R32047		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R32048		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R32049		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32052		ERDS2T0	C.RESISTOR 1/4W 0	1	
R32063		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R32064		EROS2CKG1101	M.RESISTOR 1/4W 1.1K	1	
R32065		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R32066,67		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32068		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R32069		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R32070		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R32071,72		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32073,74		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R32075		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32076		EROS2CKG5600	M.RESISTOR 1/4W 560	1	
R32077		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32078		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R32079		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R32080		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R32081		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R32082		ERDS2TJ820	C.RESISTOR 1/4W 82	1	
R32083		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R32084		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R32085		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R32086		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R32087		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32088		EROS2CKG1501	M.RESISTOR 1/4W 1.5K	1	
R32089		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R32090		EROS2CKG1501	M.RESISTOR 1/4W 1.5K	1	
R32091		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R32092		EROS2CKF1802	M.RESISTOR 1/4W 18K	1	
R32093		EROS2CKF1302	M.RESISTOR 1/4W 13K	1	
R32094		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R32095		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R32096		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R32097		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32098		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R32099,00		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R32101,02		ERDS2TJ153	C.RESISTOR 1/4W 15K	2	
R32103		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32104		ERDS2TJ334	C.RESISTOR 1/4W 330K	1	
R32105		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R32106,07		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R32108		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R32109,10		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32111-13		ERDS2TJ563	C.RESISTOR 1/4W 56K	3	
R32121		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32122		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R32123,24		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32125		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R32126		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32127,28		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R32129		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32130		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32131		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R32132		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32133		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R32134		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R32135		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32136		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R32137		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32138		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R32139,40		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R32141		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R32142		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R32143,44		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R32145		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R32146		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32147		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R32149		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R32150		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R32151		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R32153		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R32154		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R32155,56		ERDS2TJ155	C.RESISTOR 1/4W 1.5M	2	
R32157		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R32158		ERD2FCJ4R7	C.RESISTOR 2W 4.7	1	
RA32001		EXBP88152J	COMBI R-R	1	
VR32001		EVM31CA00B24	V.RESISTOR 20K	1	
VR32002		EVN32CA00B53	V.RESISTOR 5K	1	
X32001		VSX0297	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E91		VMP0903	SUPPORT	1	
E92		VSC1799	SHIELD PLATE	1	
	■	VEP01347A	SUB POWER SUPPLY C.B.A.		
			CAPACITORS		
C1201,02		ECEA1ESS471	E.CAPACITOR 25V 470U	2	
C1203,04		ECEA1VPZ101	E.CAPACITOR 35V 100U	2	
C1205,06		ECEA1ESS471	E.CAPACITOR 25V 470U	2	
D1201-04		10E1	DIODE	4	<R>
F1201,02		XBA2C06TB0	FUSE 0.6A	2	<!><R>
IC1201		AN7812F	IC	1	<R>
IC1202		AN7912F	IC	1	<R>
P1201		VJP1244T	CONNECTOR(MALE) 4P	1	
P1202		VJP1242T	CONNECTOR(MALE) 2P	1	
	■	VEP04240A	AUDIO JACK C.B.A.		
			CAPACITORS		
C4501-04		ECEA1CBZ100	E.CAPACITOR 16V 10U	4	
C4505,06		ECEA1CPZ100	E.CAPACITOR 16V 10U	2	
C4507-12		ECEA1CBZ100	E.CAPACITOR 16V 10U	6	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4513		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4514		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4515		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4516		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4517		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4518		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4519		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4520		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C4521,22		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C4523		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C4524,25		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C4526		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C4527,28		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C4529		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C4530,31		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C4532,33		ECEA1CPZ100	E.CAPACITOR 16V 10U	2	
C4534		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4535		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C4536-43		ECEA1CPZ100	E.CAPACITOR 16V 10U	8	
C4544		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4545		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4546,47		ECUM1H330JCN	CHIP 50V 33P	2	
D4501-16		MA151K	DIODE	16	<R>
D4517		MA153	DIODE	1	<R>
IC4501-03		NJM4556MB	IC	3	<R>
IC4504		AN6558S	IC	1	<R>
IC4505-07		NJM4556MB	IC	3	<R>
IC4508,09		AN6558S	IC	2	<R>
IC4510,11		MN4066BS	IC	2	<R>
IC4512,13		AN6558S	IC	2	<R>
IC4514-17		NJM4556MB	IC	4	<R>
P4501		VJP1231R	CONNECTOR(MALE) 4P	1	
P4502		VJP1231G	CONNECTOR(MALE) 4P	1	
P4503		VJP1231B	CONNECTOR(MALE) 4P	1	
P4504		VJP1230T	CONNECTOR(MALE) 3P	1	
P4505		VJP1231T	CONNECTOR(MALE) 4P	1	
P4506		VJP1231R	CONNECTOR(MALE) 4P	1	
P4507		VJP1230G	CONNECTOR(MALE) 3P	1	
P4508		VJP1233R	CONNECTOR(MALE) 6P	1	
P4509		VJP1233T	CONNECTOR(MALE) 6P	1	
P4510		VJP1231G	CONNECTOR(MALE) 4P	1	
P4511		VJP1231R	CONNECTOR(MALE) 4P	1	
P4512		VJP1233T	CONNECTOR(MALE) 6P	1	
P4513		VJP1233R	CONNECTOR(MALE) 6P	1	
P4514		VJP1230T	CONNECTOR(MALE) 3P	1	
Q4501-09		2SD601	TRANSISTOR CHIP	9	(Q,R,S)<R>
Q4510		2SD602	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4511		2SB710	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4512		2SD1328	TRANSISTOR	1	<R>
Q4513,14		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q4515-18		2SD1328	TRANSISTOR	4	<R>
Q4519,20		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q4521-24		2SD1328	TRANSISTOR	4	<R>
Q4525,26		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q4527-30		2SD1328	TRANSISTOR	4	<R>
Q4531,32		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q4533		2SD1328	TRANSISTOR	1	<R>
Q4534,35		2SD1328	TRANSISTOR	2	<R>
Q4536		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4537		2SB710	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4538		2SD602	TRANSISTOR CHIP	1	(Q,R,S)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR4501,02		UN2113	TRANSISTOR-RESISTOR	2	<R>
			RESISTORS		
R4501		ERJ6GEYJ681	CHIP 1/10W 680	1	
R4502,03		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R4504,05		ERJ6GEYJ822	CHIP 1/10W 8.2K	2	
R4506.07		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R4508		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4509-12		ERJ6GEYJ472	CHIP 1/10W 4.7K	4	
R4513		ERJ6GEYJ222	CHIP 1/10W 2.2K	1	
R4514		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4515		ERJ6GEYJ681	CHIP 1/10W 680	1	
R4516,17		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R4518,19		ERJ6GEYJ822	CHIP 1/10W 8.2K	2	
R4520,21		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R4522		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4523-26		ERJ6GEYJ472	CHIP 1/10W 4.7K	4	
R4527		ERJ6GEYJ222	CHIP 1/10W 2.2K	1	
R4528		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4529		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4530		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R4531		ERJ6GEYJ273	CHIP 1/10W 27K	1	
R4532		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4533-35		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R4536		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R4537		ERJ6GEYJ273	CHIP 1/10W 27K	1	
R4538		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4539,40		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R4541		ERJ6GEYJ681	CHIP 1/10W 680	1	
R4542,43		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R4544,45		ERJ6GEYJ822	CHIP 1/10W 8.2K	2	
R4546,47		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R4548		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4549-52		ERJ6GEYJ472	CHIP 1/10W 4.7K	4	
R4553		ERJ6GEYJ222	CHIP 1/10W 2.2K	1	
R4554		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4555		ERJ6GEYJ681	CHIP 1/10W 680	1	
R4556,57		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R4558,59		ERJ6GEYJ822	CHIP 1/10W 8.2K	2	
R4560,61		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R4562		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4563-66		ERJ6GEYJ472	CHIP 1/10W 4.7K	4	
R4567		ERJ6GEYJ222	CHIP 1/10W 2.2K	1	
R4568		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4569		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4570		ERJ6GEYJ153	CHIP 1/10W 15K	1	
R4571		ERJ6GEYJ124	CHIP 1/10W 120K	1	
R4572-76		ERJ6GEYJ103	CHIP 1/10W 10K	5	
R4577		ERJ6GEYJ153	CHIP 1/10W 15K	1	
R4578		ERJ6GEYJ124	CHIP 1/10W 120K	1	
R4579-82		ERJ6GEYJ103	CHIP 1/10W 10K	4	
R4583-86		ERJ6GEYJ104	CHIP 1/10W 100K	4	
R4587.88		ERJ6GEYJ102	CHIP 1/10W 1K	2	
R4589,90		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R4591		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R4592,93		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R4594.95		ERJ6GEYJ124	CHIP 1/10W 120K	2	
R4596,97		ERJ6GEYJ151	CHIP 1/10W 150	2	
R4598		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4599		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
R4600		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4601		ERJ6GEYJ183	CHIP 1/10W 180K	1	
R4602		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4603-05		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R4606		ERJ6GEYJ152	CHIP 1/10W 1.5K	1	
R4607		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R4608		ERJ6GEYJ473	CHIP 1/10W 47K	1	
R4609		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R4610		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4611		ERJ6GEYG912	CHIP 1/10W 9.1K	1	
R4612		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4613,14		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4615		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4616		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R4617		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R4618		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4619-24		ERJ6GEYJ103	CHIP 1/10W 10K	6	
R4625		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
R4626		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4627		ERJ6GEYJ183	CHIP 1/10W 180K	1	
R4628		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4629-31		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R4632		ERJ6GEYJ152	CHIP 1/10W 1.5K	1	
R4633		ERJ6GEYJ473	CHIP 1/10W 47K	1	
R4634,35		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4636		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4637		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4638		ERJ6GEYG912	CHIP 1/10W 9.1K	1	
R4639,40		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4641		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4642		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R4643		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R4644		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4645-50		ERJ6GEYJ103	CHIP 1/10W 10K	6	
R4651		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
R4652		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4653		ERJ6GEYJ183	CHIP 1/10W 180K	1	
R4654		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4655-57		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R4658		ERJ6GEYJ152	CHIP 1/10W 1.5K	1	
R4659		ERJ6GEYJ473	CHIP 1/10W 47K	1	
R4660,61		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4662		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4663		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4664,65		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4666		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R4667		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R4668		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4669		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4670		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4671		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R4672		ERJ6GEYG912	CHIP 1/10W 9.1K	1	
R4673-76		ERJ6GEYJ103	CHIP 1/10W 10K	4	
R4677		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
R4678		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4679		ERJ6GEYJ183	CHIP 1/10W 180K	1	
R4680		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R4681-83		ERJ6GEYJ103	CHIP 1/10W 10K	3	
R4684		ERJ6GEYJ152	CHIP 1/10W 1.5K	1	
R4685		ERJ6GEYJ473	CHIP 1/10W 47K	1	
R4686,87		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4688		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4689		ERJ6GEYG912	CHIP 1/10W 9.1K	1	
R4690		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4691,92		ERJ6GEYJ332	CHIP 1/10W 3.3K	2	
R4693		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R4694		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R4695		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R4696		ERJ6GEYJ470	CHIP 1/10W 47	1	
R4697-01		ERJ6GEYJ103	CHIP 1/10W 10K	5	
R4702,03		ERJ6GEYJ473	CHIP 1/10W 47K	2	
R4704		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R4705		ERJ6GEYJ563	CHIP 1/10W 56K	1	
R4706.07		ERJ6GEYJ151	CHIP 1/10W 150	2	
R4708-11		ERJ6GEYJ562	CHIP 1/10W 5.6K	4	
SW4501-03		ESD14339	SWITCH	3	<R>
VR4501-08		EVN3ZCA00B53	V.RESISTOR 5K	8	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP04239B	NORMAL AUDIO C.B.A.		INCLUDING THE
					TIME CODE PACK C.B.A.
					(VEP00G62A)
					SUB AUDIO PACK (1)
					C.B.A. (VEP04133B)
					SUB AUDIO PACK (2)
					C.B.A. (VEOP04139B)
			CAPACITORS		
C1		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C2		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C3,C4		ECEA1HKN010	E.CAPACITOR 50V 1U	2	
C6		ECUX1H561KBN	CHIP 50V 560P	1	
C7		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C8,C9		ECEA1CKS330	E.CAPACITOR 16V 33U	2	
C401		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C402		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C403		ECEA1CPZ100	E.CAPACITOR 16V 10U	1	
C404		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C405		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C406		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C407		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C408,09		ECEA1CPZ100	E.CAPACITOR 16V 10U	2	
C410		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C411		ECQB1H562JZ	M.CAPACITOR 50V 5600P	1	
C412		ECQB1H273JZ	MYLAR 50V 0.027U	1	
C413		ECEA1CBZ100	E.CAPACITOR 16V 10U	1	
C414		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	
C415,16		ECEA1CPZ100	E.CAPACITOR 16V 10U	2	
C417		ECEA1EPZ221	E.CAPACITOR 25V 220U	1	
C418		ECEA1EPZ471	E.CAPACITOR 25V 470U	1	
C419		ECEA1HBZ010	E.CAPACITOR 50V 1U	1	
C420		ECEA10M33	E.CAPACITOR 10V 33U	1	
C421		ECEA1CPK101	E.CAPACITOR 16V 100U	1	
C422		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C423		ECEA1HPZ2R2	E.CAPACITOR 50V 2.2U	1	
C424		ECEA1HPZ4R7	E.CAPACITOR 50V 4.7U	1	
C425		ECUX1H561KBN	CHIP 50V 560P	1	
C426		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C427		ECEA50M1	E.CAPACITOR 50V 1U	1	
C428		ECEA10M33	E.CAPACITOR 10V 33U	1	
C429		ECEA50ZR47	E.CAPACITOR 50V 0.47U	1	
C430		ECEA25Z4R7	E.CAPACITOR 25V 4.7U	1	
C431,32		ECUM1H102KBN	CHIP 50V 1000P	2	
C433		ECUX1H471KBN	CHIP 50V 470P	1	
C434,35		ECUM1H102KBN	CHIP 50V 1000P	2	
C436		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	
C437		ECEA1CPZ100	E.CAPACITOR 16V 10U	1	
C438		ECQB1H273JZ	MYLAR 50V 0.027U	1	
C451-55		ECEA1CPZ100	E.CAPACITOR 16V 10U	5	
C458		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C459,60		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C461		ECEA1CPZ100	E.CAPACITOR 16V 10U	1	
C463		ECEA1CU220	E.CAPACITOR 16V 22U	1	
C464,65		ECEA1CPZ100	E.CAPACITOR 16V 10U	2	
C4001		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4002		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C4003		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C4004		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4005		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	
C4006		ECEA1VPZ101	E.CAPACITOR 35V 100U	1	
C4007		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4008		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C4009		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C4011		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	
C4012		ECEA1HKZR2	E.CAPACITOR 50V 2.2U	1	
C4013		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	
C4014		ECEA50ZR68	E.CAPACITOR 50V 0.68U	1	
C4015		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4016		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C4017		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C4018		ECEA1HPZ010	E.CAPACITOR 50V 1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4019		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C4020		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4022		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4023		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4024		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4025		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4026		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4027		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C4028		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4029		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4030		ECCF1H330KC	C.CAPACITOR 50V 33P	1	
C4031		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C4032		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4033		ECQM2152KZ	P.CAPACITOR 200V 1500P	1	
C4034		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4035,36		ECQB1H102KH	P.CAPACITOR 50V 1000P	2	
C4037		ECQB1H103KH	P.CAPACITOR 50V 0.01U	1	
C4038		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C4039		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4040		ECQM2822KZ	P.CAPACITOR 200V 8200P	1	
C4041		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4042		ECQB1H152KH	P.CAPACITOR 50V 1500P	1	
C4043		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4044		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4045		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4046		ECQB1H152KH	P.CAPACITOR 50V 1500P	1	
C4047		ECKD2H151KB	C.CAPACITOR 500V 150P	1	
C4048		ECQM2152KZ	P.CAPACITOR 200V 1500P	1	
C4049		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4050		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4051		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4052		ECQB1H152KH	P.CAPACITOR 50V 1500P	1	
C4053		ECKD2H151KB	C.CAPACITOR 500V 150P	1	
C4054		ECQM2152KZ	P.CAPACITOR 200V 1500P	1	
C4055		ECEA1EKN3R3	ELECTROLYTIC 25V 3.3U	1	
C4056		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4057		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4058		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C4059,60		ECQB1H102KH	P.CAPACITOR 50V 1000P	2	
C4061		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C4062		ECEA1EKN3R3	ELECTROLYTIC 25V 3.3U	1	
C4063		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4064		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4065		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C4066,67		ECQB1H102KH	P.CAPACITOR 50V 1000P	2	
C4068		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C4069		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4070-75		ECEA1CPZ100	E.CAPACITOR 16V 10U	6	
C4076		ECEA1VPZ470	E.CAPACITOR 35V 47U	1	
C4080		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4089,90		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4091,92		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C4096,97		ECQB1H153JH	P.CAPACITOR 50V 0.015U	2	
C4098		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4099,00		ECEA1VPZ470	E.CAPACITOR 35V 47U	2	
C4101		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4102,03		ECQV1H124JZ	P.CAPACITOR 50V 0.12U	2	
C4104,05		ECQB1H682JH	P.CAPACITOR 50V 6800P	2	
C4106,07		ECKD2H331KB	C.CAPACITOR 500V 330P	2	
C4108		ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C4109,10		ECQB1H332JH	P.CAPACITOR 50V 3300P	2	
D401		MA151WK	DIODE	1	<R>
D402		MA165	DIODE	1	<R>
D403		MA151WK	DIODE	1	<R>
D404-07		MA165	DIODE	4	<R>
D408		MA151K	DIODE	1	<R>
D409-12		MA165	DIODE	4	<R>
D4001-12		MA165	DIODE	12	<R>
D4013		RD6.2EB	ZENER 6.2V	1	<R>
D4014		MA165	DIODE	1	<R>
D4015-18		0A90	DIODE	4	<R>
D4019-24		MA165	DIODE	6	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D4025,26		MA4043	DIODE	2	<R>
D4027		MA165	DIODE	1	<R>
D4030-32		MA165	DIODE	3	<R>
IC1		AN6912	IC	1	<R>
IC401		NE646N	IC	1	<R>
IC402		BA12005	IC	1	<R>
IC451-53		UPC4558C	IC	3	<R>
IC454		UPD4066BC	IC	1	<R>
IC4003		UPC4558C	IC	1	<R>
IC4004		AN360	IC	1	<R>
IC4005		UPD4066BC	IC	1	<R>
IC4006		UPC4558C	IC	1	<R>
IC4007,08		UPD4066BC	IC	2	<R>
IC4009		UPC4558C	IC	1	<R>
IC4011		UPC4558C	IC	1	<R>
L401		VLF0402	FILTER	1	
L4001-04		VLQEL06F102K	COIL 1UH	4	
L4005,06		VLQEL06F471K	COIL 470UH	2	
L4007,08		VLQ0123	COIL	2	
L4009		VLQEL05F471K	COIL 470UH	1	
L4010		VLQEL05F221K	COIL 220UH	1	
L4011,12		VLQEL05F102K	COIL 1000UH	2	
L4013		VLQ0142	COIL	1	
P4001		VJP1236T	CONNECTOR(MALE) 9P	1	
P4002		VJP1235T	CONNECTOR(MALE) 8P	1	
P4003		VJP1229T	CONNECTOR(MALE) 2P	1	
P4004		VJP1233G	CONNECTOR(MALE) 6P	1	
P4005		VJP1233T	CONNECTOR(MALE) 6P	1	
P4006		VJP1232T	CONNECTOR(MALE) 5P	1	
P4007		VJP1230T	CONNECTOR(MALE) 3P	1	
P4008		VJP1230R	CONNECTOR(MALE) 3P	1	
P4009		VJP1229	CONNECTOR(MALE) 2P	1	
P4010		VJP1230R	CONNECTOR(MALE) 3P	1	
P4011,12		VJP1230T	CONNECTOR(MALE) 3P	2	
P4013		VJP1231G	CONNECTOR(MALE) 4P	1	
P4051		VJP1235R	CONNECTOR(MALE) 8P	1	
P4052		VJP1231T	CONNECTOR(MALE) 4P	1	
P4057		VJP1231R	CONNECTOR(MALE) 4P	1	
P4058		VJP1236T	CONNECTOR(MALE) 9P	1	
P4059		VJP1231G	CONNECTOR(MALE) 4P	1	
P4060		VJP1231T	CONNECTOR(MALE) 4P	1	
P4061		VJP1230T	CONNECTOR(MALE) 3P	1	
P4062		VJP1230G	CONNECTOR(MALE) 3P	1	
P4063		VJP1229	CONNECTOR(MALE) 2P	1	
Q1,Q2		2SD601	TRANSISTOR CHIP	2	(Q,R)<R>
Q401,02		2SD601	TRANSISTOR CHIP	2	(Q,R)<R>
Q403		2SB710	TRANSISTOR	1	(Q,R,T)<R>
Q404		2SD601	TRANSISTOR CHIP	1	(Q,R)<R>
Q405		2SD1328	TRANSISTOR	1	<R>
Q4001		2SB641	TRANSISTOR	1	(Q,R)<R>
Q4002,03		2SD636	TRANSISTOR	2	(Q,R)<R>
Q4004		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4005,06		2SD639	TRANSISTOR	2	(Q,R)<R>
Q4007		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4008		2SD639	TRANSISTOR	1	(Q,R)<R>
Q4009		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4010		2SD639	TRANSISTOR	1	(Q,R)<R>
Q4011		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4012		2SD639	TRANSISTOR	1	(Q,R)<R>
Q4013		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4014		2SD639	TRANSISTOR	1	(Q,R)<R>
Q4015		2SB641	TRANSISTOR	1	(Q,R)<R>
Q4016,17		2SD973	TRANSISTOR	2	(Q,R)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4018		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4019		2SD639	TRANSISTOR	1	(Q,R)<R>
Q4020		2SB641	TRANSISTOR	1	(Q,R)<R>
Q4021,22		2SD973	TRANSISTOR	2	(Q,R)<R>
Q4023		2SD636	TRANSISTOR	1	(Q,R)<R>
Q4024		2SB643	TRANSISTOR	1	(Q,R)<R>
Q4025		2SD636	TRANSISTOR	1	(Q,R)<R>
Q4026		2SB788	TRANSISTOR	1	(R,S)<R>
Q4027,28		2SD958	TRANSISTOR	2	(S,T)<R>
Q4029		2SB788	TRANSISTOR	1	(R,S)<R>
Q4030,31		2SD958	TRANSISTOR	2	(S,T)<R>
QR1		UN2211	TRANSISTOR-RESISTOR	1	<R>
QR401		UN2211	TRANSISTOR-RESISTOR	1	<R>
QR402		UN2111	TRANSISTOR-RESISTOR	1	<R>
QR403		UN2213	TRANSISTOR-RESISTOR	1	<R>
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QR406		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR407		UN2111	TRANSISTOR-RESISTOR	1	<R>
QR4001		UN1114	TRANSISTOR-RESISTOR	1	<R>
QR4002		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR4003		UN1211	TRANSISTOR-RESISTOR	1	<R>
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QR4005		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR4006		UN1211	TRANSISTOR-RESISTOR	1	<R>
QR4007-09		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR4013		UN1111	TRANSISTOR-RESISTOR	1	<R>
QR4015		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR4016		UN1211	TRANSISTOR-RESISTOR	1	<R>
QR4017,18		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR4019,20		UN1215	TRANSISTOR-RESISTOR	2	<R>
QR4021		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4022		DTC144WA	TRANSISTOR RESISTOR	1	<R>
			RESISTORS		
R01		ERJ6GEYJ563	CHIP 1/10W 56K	1	
R02,03		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R04		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R05		ERJ6GEYJ122	CHIP 1/10W 1.2K	1	
R06		ERJ6GEYJ563	CHIP 1/10W 56K	1	
R07		ERJ6GEYJ223	CHIP 1/10W 22K	1	
R08		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R09		ERJ6GEYJ474	CHIP 1/10W 470K	1	
R10		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R11		ERJ6GEYJ333	CHIP 1/10W 33K	1	
R12		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R13		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R14		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R15		ERJ6GEYJ821	CHIP 1/10W 820	1	
R16		ERJ6GEYJ560	CHIP 1/10W 56	1	
R17		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R18		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R19		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R20		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R21		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R22		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R23,24		ERJ6GEYJ223	CHIP 1/10W 22K	2	
R25,26		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R27		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R28		ERJ6GEYJ223	CHIP 1/10W 22K	1	
R29		ERJ6GEYJ564	CHIP 1/10W 560K	1	
R30,31		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R401		ERJ6GEYJ682	CHIP 1/10W 6.8K	1	
R402		ERJ6GEYJ154	CHIP 1/10W 150K	1	
R403		ERJ6GEYJ682	CHIP 1/10W 6.8K	1	
R404		ERJ6GEYJ221	CHIP 1/10W 220	1	
R405		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R406		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R407,08		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R409		ERJ6GEYJ393	CHIP 1/10W 39K	1	
R410,11		ERJ6GEYJ562	CHIP 1/10W 5.6K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R412		ERJ6GEYJ393	CHIP 1/10W 39K	1	
R413		ERJ6GEYJ224	CHIP 1/10W 220K	1	
R414		ERJ6GEYJ105	CHIP 1/10W 1M	1	
R415		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R416		ERJ6GEYJ222	CHIP 1/10W 2.2K	1	
R417		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R418		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R419		ERJ6GEYJ331	CHIP 1/10W 330	1	
R420		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R421		ERJ6GEYJ824	CHIP 1/10W 820K	1	
R422		ERJ6GEYJ561	CHIP 1/10W 560	1	
R423		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
R424		ERJ6GEYJ333	CHIP 1/10W 33K	1	
R425		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R426		ERJ6GEYJ181	CHIP 1/10W 180	1	
R427		ERJ6GEYJ473	CHIP 1/10W 47K	1	
R428		ERJ6GEYJ332	CHIP 1/10W 3.3K	1	
R429-31		ERJ6GEYJ102	CHIP 1/10W 1K	3	
R432		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R433		ERJ6GEYJ184	CHIP 1/10W 180K	1	
R434		ERJ6GEYJ274	CHIP 1/10W 270K	1	
R435		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R436		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R437,38		ERJ6GEYJ472	CHIP 1/10W 4.7K	2	
R439		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R440		ERJ6GEYJ822	CHIP 1/10W 8.2K	1	
R441		ERJ6GEYJ103	CHIP 1/10W 10K	1	
R442		ERJ6GEYJ562	CHIP 1/10W 5.6K	1	
R451		ERJ6GEYJ104	CHIP 1/10W 100K	1	
R452		ERJ6GEYJ561	CHIP 1/10W 560	1	
R453		ERJ6GEYJ331	CHIP 1/10W 330	1	
R454		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R455		ERJ6GEYJ272	CHIP 1/10W 2.7K	1	
R456,57		ERJ6GEYJ102	CHIP 1/10W 1K	2	
R458-60		ERJ6GEYJ104	CHIP 1/10W 100K	3	
R461		ERJ6GEYJ223	CHIP 1/10W 22K	1	
R462,63		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R464		ERJ6GEYJ272	CHIP 1/10W 2.7K	1	
R465,66		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R467		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R468-70		ERJ6GEYJ223	CHIP 1/10W 22K	3	
R471-74		ERJ6GEYJ273	CHIP 1/10W 27K	4	
R475		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R476		ERJ6GEYJ272	CHIP 1/10W 2.7K	1	
R477		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R478		ERJ6GEYJ272	CHIP 1/10W 2.7K	1	
R4001		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4002		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4005		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R4006		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4007		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4008-10		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R4011		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4012		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4013		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4014		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4015		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R4016		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R4017		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4018		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4019		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4021		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4022		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R4023		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R4024		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R4025		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4026		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4027		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4029		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4030		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R4032		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4033,34		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4035		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4037		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4038		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4039		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4040		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R4041		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R4042		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4043		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4044		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4045		ERDS2TJ220	C.RESISTOR 1/4W 22	1	
R4046		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R4047		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R4048		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4049		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4050		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4051		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R4052		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4053		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R4054		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4055		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4056		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R4057		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4058		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R4059		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4060		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4061		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R4062		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4063		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4064		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4065		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4066		ERDS1TJ180	C.RESISTOR 1/2W 18	1	
R4067		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4068		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4069		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4070,71		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4072		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4073		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4074		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4075		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4076		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4077		ERDS1TJ180	C.RESISTOR 1/2W 18	1	
R4078		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4079		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4080		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4081		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4082		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4083		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4084,85		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4086-89		ERDS2TJ104	C.RESISTOR 1/4W 100K	4	
R4090		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4091		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4092		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4093		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4094-99		ERDS2TJ103	C.RESISTOR 1/4W 10K	6	
R4100		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4101		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4102		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4103		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4113,14		ERDS2TJ393	C.RESISTOR 1/4W 39K	2	
R4115		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4123,24		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4125		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4126		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4127		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4128		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4129		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4130,31		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4132		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4133		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4134-36		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	3	
R4137,38		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4139		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R4140,41		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R4142-44		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R4145		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4146		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R4147,48		ERDS2TJ155	C.RESISTOR 1/4W 1.5M	2	
R4149,50		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4151		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4152		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R4153,54		ERDS2TJ155	C.RESISTOR 1/4W 1.5M	2	
R4157		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
RY4001		VSY2035	RELAY	1	<R>
RY4002,03		VSY1015	RELAY	2	<R>
T4001		VLT0143	TRANSFORMER	1	
T4002		VLT0144	TRANSFORMER	1	
T4003,04		VLT0146	TRANSFORMER	2	
T4005,06		VLT0145	TRANSFORMER	2	
VR4001		EVN38CA00B53	V.RESISTOR 5K	1	
VR4002		EVN38CA00B24	V.RESISTOR 20K	1	
VR4003,04		EVN38CA00B53	V.RESISTOR 5K	2	
VR4005		EVN38CA00B24	V.RESISTOR 20K	1	
VR4006,07		EVN38CA00B53	V.RESISTOR 5K	2	
VR4009,10		EVN38CA00B53	V.RESISTOR 5K	2	
VR4011,12		EVN38CA00B54	V.RESISTOR 50K	2	
			MISCELLANEOUS		
E59		VMP0902	SUPPORT	1	
E60		VSC1706	SHIELD CASE (UPPER)	1	
E61		VSC1707	SHIELD CASE (MIDDLE)	1	
E62		VSC1708	SHIELD CASE (LOWER)	1	
	■	VEP04134D	HD AUDIO C.B.A.		
			CAPACITORS		
C4301-04		VCEA1CAE100J	E.CAPACITOR 16V 10U	4	
C4305		VCEA1CAE470J	E.CAPACITOR 16V 47U	1	
C4306		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4307		VCEA1CAE470J	E.CAPACITOR 16V 47U	1	
C4308		VCEA0JAE101	E.CAPACITOR 6.3V 100U	1	
C4309		ECQV1H104J2	P.CAPACITOR 50V 0.1U	1	
C4310		VCEA1CAE470J	E.CAPACITOR 16V 47U	1	
C4311		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C4312		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C4313		VCEA1CAE470J	E.CAPACITOR 16V 47U	1	
C4314,15		VCEA1CAE101	E.CAPACITOR 16V 100U	2	
C4316-19		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	4	
C4320		VCEA1CAE470J	E.CAPACITOR 16V 47U	1	
C4321,22		VCEA1CAE330	E.CAPACITOR 16V 33U	2	
C4323,24		ECCF1H330KC	C.CAPACITOR 50V 33P	2	
C4325		VCEA1AAE101N	E.CAPACITOR 10V 100U	1	
C4326,27		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	2	
C4328		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4329		VCEA1CAE330	E.CAPACITOR 16V 33U	1	
C4330		VCEA1AAE470J	E.CAPACITOR 10V 47U	1	
C4331		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4332		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4333		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4334		ECQB1H103KH	P.CAPACITOR 50V 0.01U	1	
C4335		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4336		VCEA1CAG100	E.CAPACITOR 16V 10U	1	
C4337		VCEA0JAG470	E.CAPACITOR 6.3V 47U	1	
C4338,39		VCEA1CAE100J	E.CAPACITOR 16V 10U	2	
C4340,41		VCEA1AAE470J	E.CAPACITOR 10V 47U	2	
C4342		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4343		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4344		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	1	
C4345		ECQB1H222JH	P.CAPACITOR 50V 2200P	1	
C4346		VCEA1AAE470J	E.CAPACITOR 10V 47U	1	
C4347		ECEA25Z4R7	E.CAPACITOR 25V 4.7U	1	
C4348		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4349		ECEA16Z10	E.CAPACITOR 16V 10U	1	
C4350		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4351		VCEA1CAE330	E.CAPACITOR 16V 33U	1	
C4352		VCEA1AAE470J	E.CAPACITOR 10V 47U	1	
C4353,54		ECQB1H102KH	P.CAPACITOR 50V 1000P	2	
C4355		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4356		ECQB1H103KH	P.CAPACITOR 50V 0.01U	1	
C4357		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4358		VCEA1CAG100	E.CAPACITOR 16V 10U	1	
C4359		VCEA0JAG470	E.CAPACITOR 6.3V 47U	1	
C4360,61		VCEA1CAE100J	E.CAPACITOR 16V 10U	2	
C4362,63		VCEA1AAE470J	E.CAPACITOR 10V 47U	2	
C4364		ECQB1H102KH	P.CAPACITOR 50V 1000P	1	
C4365		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4366		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	1	
C4367		ECQB1H222JH	P.CAPACITOR 50V 2200P	1	
C4368		VCEA1AAE470J	E.CAPACITOR 10V 47U	1	
C4369		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4370		ECEA25Z4R7	E.CAPACITOR 25V 4.7U	1	
C4371		ECEA16Z10	E.CAPACITOR 16V 10U	1	
C4372		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C4373		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4374		VCEA1AAE220	E.CAPACITOR 10V 22U	1	
C4375		ECCF1H820K	C.CAPACITOR 50V 82P	1	
C4376		ECCF1H680K	C.CAPACITOR 50V 68P	1	
C4377		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4378		ECCF1H680K	C.CAPACITOR 50V 68P	1	
C4379,80		ECCF1H470K	C.CAPACITOR 50V 47P	2	
C4381		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C4382		VCEA1CAE100J	E.CAPACITOR 16V 10U	1	
C4383		VCEA1AAE220	E.CAPACITOR 10V 22U	1	
C4384		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4385		VCEA1HAE010J	E.CAPACITOR 50V 1U	1	
C4386		VCEA1HAG3R3	E.CAPACITOR 50V 3.3U	1	
C4387		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C4388		VCEA0JAE470	E.CAPACITOR 6.3V 47U	1	
C4389		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4390		ECQB1H272KH	P.CAPACITOR 50V 2700P	1	
C4391		VCEA0JAE470	E.CAPACITOR 6.3V 47U	1	
C4392		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C4393		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4394		VCEA1AAE220	E.CAPACITOR 10V 22U	1	
C4395		ECCF1H820K	C.CAPACITOR 50V 82P	1	
C4396		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4397		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C4398		VCEA1CAE100J	E.CAPACITOR 16V 10U	1	
C4399		VCEA1AAE220	E.CAPACITOR 10V 22U	1	
C4400		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C4401		VCEA1HAE010J	E.CAPACITOR 50V 1U	1	
C4402		VCEA1HAG3R3	E.CAPACITOR 50V 3.3U	1	
C4403		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C4404		VCEA0JAE470	E.CAPACITOR 6.3V 47U	1	
C4405		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4406		ECQB1H272KH	P.CAPACITOR 50V 2700P	1	
C4407		VCEA0JAE470	E.CAPACITOR 6.3V 47U	1	
C4408		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4409,10		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C4412		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
D4301,02		MA165	DIODE	2	<R>
D4303		MA4056M	DIODE	1	<R>
D4304-06		MA165	DIODE	3	<R>
D4307,08		1S1007	DIODE	2	<R>
D4309-24		MA165	DIODE	16	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC4301		UPC4558C	IC	1	<R>
IC4302,03		UPC4557C	IC	2	<R>
IC4304,05		AN6298NK	IC	2	<R>
IC4306,07		AN3922NK	IC	2	<R>
L4301,02		VLQEL05F221K	COIL 220UH	2	
L4303,04		VLQEL05F101K	COIL 100UH	2	
L4305		VLQEL05F121K	COIL 120UH	1	
L4306		VLQEL05F101K	COIL 100UH	1	
L4307		VLQEL05F221K	COIL 220UH	1	
L4308		VLQ0199	COIL	1	
P4301		VJP1231T	CONNECTOR(MALE) 4P	1	
P4302		VJP1231R	CONNECTOR(MALE) 4P	1	
P4303		VJP1231T	CONNECTOR(MALE) 4P	1	
P4304		VJP1230T	CONNECTOR(MALE) 3P	1	
P4305		VJP1229T	CONNECTOR(MALE) 2P	1	
P4306		VJP1229	CONNECTOR(MALE) 2P	1	
P4307		VJP1237T	CONNECTOR(MALE) 10P	1	
P4308		VJP1229T	CONNECTOR(MALE) 2P	1	
P4309		VJP1231G	CONNECTOR(MALE) 4P	1	
Q4301		2SB641	TRANSISTOR	1	(Q,R)<R>
Q4302,03		2SD636	TRANSISTOR	2	(Q,R)<R>
Q4304		2SD1330	TRANSISTOR	1	(S,T)<R>
Q4305,06		2SD636	TRANSISTOR	2	(Q,R)<R>
Q4307		2SD973	TRANSISTOR	1	(Q,R,S)<R>
Q4308		2SD636	TRANSISTOR	1	(Q,R)<R>
Q4309		2SB819	TRANSISTOR	1	(Q,R)<R>
Q4310-12		2SB641	TRANSISTOR	3	(Q,R)<R>
Q4313		2SD636	TRANSISTOR	1	(Q,R)<R>
Q4314,15		2SD1330	TRANSISTOR	2	(S,T)<R>
Q4316		2SD636	TRANSISTOR	1	(Q,R)<R>
Q4317,18		2SB641	TRANSISTOR	2	(Q,R)<R>
QR4301		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4302		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR4303		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4304		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR4305		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR4306		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4307		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR4308		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4309,10		DTC144WA	TRANSISTOR RESISTOR	2	<R>
QR4311		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4312		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR4313		UN1111	TRANSISTOR-RESISTOR	1	<R>
QR4314		DTC144WA	TRANSISTOR RESISTOR	1	<R>
			RESISTORS		
R4301,02		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4303		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4304		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4305		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4306		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4307		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4308		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4309		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4310		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4311		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4312		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4313		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4314		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4315		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4316		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4317		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4318		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4319		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4320		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4321		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4322		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4323		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4324		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4325		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4326		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4327		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R4328,29		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R4330,31		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4332		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4333		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4334		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4335		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4336,37		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4338,39		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4340		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4341		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4342		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4343		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4344		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4345		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4346		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4347,48		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4349,50		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R4351		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4352		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4353		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4354		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4355		EROS2CKG6201	M.RESISTOR 1/4W 6.2K	1	
R4356		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R4357		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R4358		EROS2CKG1802	M.RESISTOR 1/4W 18K	1	
R4359		EROS2CKG5601	M.RESISTOR 1/4W 5.6K	1	
R4360,61		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R4362		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4363		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4364		EROS2CKG1302	M.RESISTOR 1/4W 13K	1	
R4365		EROS2CKG9101	M.RESISTOR 1/4W 9.1K	1	
R4366		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4367		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4368		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4369		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4370		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4371,72		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R4373		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4374		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4375		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4376		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R4377		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4378		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4379,80		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4381		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4382		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4383		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4384		EROS2CKG6201	M.RESISTOR 1/4W 6.2K	1	
R4385		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R4386		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R4387		EROS2CKG5601	M.RESISTOR 1/4W 5.6K	1	
R4388		EROS2CKG1802	M.RESISTOR 1/4W 18K	1	
R4389		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4390		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4391		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4392		EROS2CKG1302	M.RESISTOR 1/4W 13K	1	
R4393		EROS2CKG9101	M.RESISTOR 1/4W 9.1K	1	
R4394		EROS2CKG1101	M.RESISTOR 1/4W 1.1K	1	
R4395		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R4396		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4397		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4398		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4399		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4400		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4401		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R4402		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4403		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R4404		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4405		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4406		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4407		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R4409		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4410		EROS2CKG1101	M.RESISTOR 1/4W 1.1K	1	
R4411		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R4412		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R4413		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4414		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4415,16		ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R4417		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4418		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4419,20		ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R4421		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4422		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4423		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4425		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R4426		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4427		ERX12ANJ1R8	M.RESISTOR 1/2W 1.8	1	
VR4301		EVN38CA00B53	V.RESISTOR 5K	1	
VR4302		EVN38CA00B14	V.RESISTOR 10K	1	
VR4303		EVN38CA00B23	V.RESISTOR 2K	1	
VR4304		EVN38CA00B52	V.RESISTOR 500	1	
VR4305		EVN38CA00B13	V.RESISTOR 1K	1	
VR4306		EVN38CA00B53	V.RESISTOR 5K	1	
VR4307		EVN38CA00B14	V.RESISTOR 10K	1	
VR4308		EVN38CA00B23	V.RESISTOR 2K	1	
			MISCELLANEOUS		
E63		VMP0903	SUPPORT	1	
E64		VSC1799	SHIELD PLATE	1	
	■	VEP05129B	REC AMP & HEAD AMP C.B.A.		
			CAPACITORS		
C4801		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4802		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4803		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4804		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C4805-08		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C4809		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C4810,11		ECCF1H560K	C.CAPACITOR 50V 56P	2	
C4812		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4813,14		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C4815		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4816		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C4817		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4818		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C4819		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4820		ECCF1H221JC	C.CAPACITOR 50V 220P	1	
C4821		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C4822		ECQB1H682KH	P.CAPACITOR 50V 6800P	1	
C4823		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4824		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C4825		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4826		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4827,28		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C4829		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4830,31		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C4832		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C5001,02		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C5003		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5004		ECCF1H390KC	C.CAPACITOR 50V 39P	1	
C5006		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C5007		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5008		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C5009		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5010		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C5011		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5012		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5013,14		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C5015		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5016		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5017-19		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	3	
C5020		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5021		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5022		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5023		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5024		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5025		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5026		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5027		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C5028		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5029		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5030		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C5031		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5032		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5033		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5034		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5035		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5036		ECCF1H121KC	C.CAPACITOR 50V 120P	1	
C5037,38		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C5039		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C5040		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C5041		ECCF1H560KC	C.CAPACITOR 50V 56P	1	
C5043		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C5044-46		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C5047		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C5048,49		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C5050		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5051		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C5052		ECCF1H101KC	C.CAPACITOR 50V 100P	1	
C5053		ECCF1H560KC	C.CAPACITOR 50V 56P	1	
C5055		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C5056-58		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C5059		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C5060,61		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C5062-64		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C5065,66		ECCF1H680KC	C.CAPACITOR 50V 68P	2	
C5067		VCKD1H431JA	C.CAPACITOR 50V 430P	1	
C5068		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5069		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5070		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C5071-74		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C5075		VCKD1H431JA	C.CAPACITOR 50V 430P	1	
C5076		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5078		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5079		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C5080		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C5081		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C5084		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C5085,86		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
CA5001		EXFP6103ZW	C & C	1	
D5001		MA165	DIODE	1	<R>
D5003-08		MA165	DIODE	6	<R>
FL4801		VLF0493	FILTER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC4801	UPC1531HA	IC	1	<R>
IC4802	AN3920K	IC	1	<R>
IC5001,02	AN6336	IC	2	<R>
IC5003	UPD4053BC	IC	1	<R>
K5001,02	VSY2041	RELAY	2	<R>
L4801-03	VLQEL05F101K	COIL 100UH	3	
L4804,05	VLP0017	COIL	2	
L4806	VLQEL05F101K	COIL 100UH	1	
L5002	VLQEL05F221K	COIL 220UH	1	
L5003	VLQEL05F101K	COIL 100UH	1	
L5004	VLQEL05F470K	COIL 47UH	1	
L5005	VLQEL05F101K	COIL 100UH	1	
L5006	VLQEL05F221K	COIL 220UH	1	
L5007	VLQEL05F101K	COIL 100UH	1	
L5008	VLQEL05F331K	COIL 330UH	1	
L5009	VLQEL05F101K	COIL 100UH	1	
L5010,11	VLQEL05F221K	COIL 220UH	2	
L5012,13	VLQEL05F681K	COIL 680UH	2	
L5014	VLQEL05F101K	COIL 100UH	1	
L5015,16	VLQEL05F821K	COIL 820UH	2	
L5017,18	VLQEL05F100K	COIL 10UH	2	
L5019	VLQEL05F151K	COIL 150UH	1	
L5020,21	VLQEL05F101K	COIL 100UH	2	
L5022	VLQEL05F151K	COIL 150UH	1	
P4801	VJP1237T	CONNECTOR(MALE) 10P	1	
P4802	VJP1233T	CONNECTOR(MALE) 6P	1	
P4803	VJP1229	CONNECTOR(MALE) 2P	1	
P4804	VJP1229T	CONNECTOR(MALE) 2P	1	
P5001	VJP1238T	CONNECTOR(MALE) 11P	1	
P5002	VJP1239T	CONNECTOR(MALE) 12P	1	
P5003	VJP1231R	CONNECTOR(MALE) 4P	1	
P5004	VJP1235T	CONNECTOR(MALE) 8P	1	
Q4801,02	2SC2377	TRANSISTOR	2	(C,D)<R>
Q4803	2SD636	TRANSISTOR	1	(Q,R)<R>
Q4804	2SB641	TRANSISTOR	1	(Q,R)<R>
Q4805	2SD636	TRANSISTOR	1	(Q,R)<R>
Q4806-08	2SD638	TRANSISTOR	3	(Q,R)<R>
Q4809-11	2SD636	TRANSISTOR	3	(Q,R)<R>
Q5001-03	2SB643	TRANSISTOR	3	(Q,R)<R>
Q5004	2SC2206	TRANSISTOR	1	(B,C)<R>
Q5005	2SD636	TRANSISTOR	1	(Q,R)<R>
Q5006,07	2SC2206	TRANSISTOR	2	(B,C)<R>
Q5008-10	2SD636	TRANSISTOR	3	(Q,R)<R>
Q5011	2SB643	TRANSISTOR	1	(Q,R)<R>
Q5012	2SD638	TRANSISTOR	1	(Q,R)<R>
Q5013	2SB643	TRANSISTOR	1	(Q,R)<R>
Q5014	2SD638	TRANSISTOR	1	(Q,R)<R>
Q5015	2SB641	TRANSISTOR	1	(Q,R)<R>
Q5016	2SD636	TRANSISTOR	1	(Q,R)<R>
Q5017	2SA1254	TRANSISTOR	1	<R>
Q5018	2SB641	TRANSISTOR	1	(Q,R)<R>
Q5019	2SA1254	TRANSISTOR	1	<R>
Q5020-23	2SC3704	TRANSISTOR	4	<R>
Q5024-27	2SD638	TRANSISTOR	4	(Q,R)<R>
Q5028,29	2SD636	TRANSISTOR	2	(Q,R)<R>
Q5031	2SD636	TRANSISTOR	1	(Q,R)<R>
Q5032-34	2SC2206	TRANSISTOR	3	(B,C)<R>
Q5035-37	2SD636	TRANSISTOR	3	(Q,R)<R>
Q5038	2SC2206	TRANSISTOR	1	(B,C)<R>

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR5001	UN1212	TRANSISTOR-RESISTOR	1	<R>
QR5003	UN1112	TRANSISTOR-RESISTOR	1	<R>
QR5004	UN1212	TRANSISTOR-RESISTOR	1	<R>
QR5005	UN1112	TRANSISTOR-RESISTOR	1	<R>
QR5006	UN1211	TRANSISTOR-RESISTOR	1	<R>
		RESISTORS		
R4801	ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R4802	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R4803,04	ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R4805	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4806	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4807	ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4808	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4809	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R4810,11	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4812,13	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	2	
R4814	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4815,16	ERDS2TJ220	C.RESISTOR 1/4W 22	2	
R4817,18	ERDS2TJ100	C.RESISTOR 1/4W 10	2	
R4819	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4820,21	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4822	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4823,24	ERDS2TJ561	C.RESISTOR 1/4W 560	2	
R4825	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4826,27	ERDS2TJ393	C.RESISTOR 1/4W 39K	2	
R4828	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4829	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4830	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4831	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R4832	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4833	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4834	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R4835,36	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	2	
R4837	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R4838	ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R4839,40	ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R4841	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4842,43	ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R4844,45	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R5001	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5002	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5003	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R5004	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5005	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R5006	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5007	ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R5008,09	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R5010	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R5013	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5014	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5015	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R5016,17	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R5018	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5019	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R5020	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R5021	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5022	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R5023	ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R5024	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5025	ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R5026	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5027	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5028,29	ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R5030	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R5031	ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R5032	ERDS2TJ4R7	C.RESISTOR 1/4W 4.7	1	
R5033	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R5034,35	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	2	
R5036	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R5037,38	ERDS2TJ150	C.RESISTOR 1/4W 15	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R5040,41		ERDS2TJ100	C.RESISTOR 1/4W 10	2	
R5042		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R5043		ERDS2TJ4R7	C.RESISTOR 1/4W 4.7	1	
R5044		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R5045,46		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	2	
R5047		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R5048,49		ERDS2TJ150	C.RESISTOR 1/4W 15	2	
R5050,51		ERDS2TJ100	C.RESISTOR 1/4W 10	2	
R5052		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R5053,54		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R5055,56		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R5057		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5058		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R5059		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R5060		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R5061		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R5062		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R5063,64		ERDS2TJ183	C.RESISTOR 1/4W 18K	2	
R5065		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5067		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5068		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R5069		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5070		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R5071		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R5072		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5073		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R5074		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R5075		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R5076		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5078		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5079,80		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R5081		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R5082,83		ERDS2TJ821	C.RESISTOR 1/4W 820	2	
R5084,85		ERDS2TJ183	C.RESISTOR 1/4W 18K	2	
R5086		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5087		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5088		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5090		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5091		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5092		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R5093,94		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R5095,96		ERDS2TJ183	C.RESISTOR 1/4W 18K	2	
R5097,98		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	2	
R5099-02		ERDS2TJ100	C.RESISTOR 1/4W 10	4	
R5103,04		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	2	
R5105		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R5106,07		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R5108,09		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R5110		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R5111		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R5112-15		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R5116,17		ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R5118-20		ERDS2TJ223	C.RESISTOR 1/4W 22K	3	
R5121		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5123		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R5124		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R5125		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5126		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R5127		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R5128		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5129		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R5130		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R5131		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R5132		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R5133		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R5134		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5135		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R5136		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R5137		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5138		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R5139,40		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R5141		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R5142		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R5143		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R5144		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R5145-47		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R5148		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
VR4801		EVN32CA00B54	V.RESISTOR 50K	1	
VR5001		EVM31GA00B23	V.RESISTOR 2K	1	
			MISCELLANEOUS		
E65		VMP0905	SUPPORT	1	
E66		VSC2101	SHIELD CASE (MIDDLE)	1	
E67		VSC2102	SHIELD CASE (LOWER)	1	
E68		VSC2104	SHIELD CASE (MIDDLE)	1	
E69		VSC2105	SHIELD CASE (LOWER)	1	
	■	VEP06319E	SYSTEM CONTROL C.B.A.		
			CAPACITORS		
C6001,02		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6003		ECKF1H472ZF	C.CAPACITOR 50V 4700P	1	
C6004		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C6005		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6006		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C6007,08		ECEA1HN2R2S	E.CAPACITOR 50V 2.2U	2	
C6009-11		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	3	
C6013		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C6014		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6015		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C6016,17		ECCF1H680JC	C.CAPACITOR 50V 68P	2	
C6018		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C6019		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C6020		ECQP1H683GZ	P.CAPACITOR 50V 0.068U	1	
C6021,22		ECQM1H102JV	P.CAPACITOR 50V 1000P	2	
C6023		ECQM1H122JV	P.CAPACITOR 50V 1200P	1	
C6024		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C6025		ECQP1H104GZ	P.CAPACITOR 50V 0.1U	1	
C6026,27		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6028		ECQM1H123JV	P.CAPACITOR 50V 0.012U	1	
C6029-31		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C6032		ECQM1H123JV	P.CAPACITOR 50V 0.012U	1	
C6033		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6034		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C6035,36		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6037		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C6038		ECCF1H470KC	C.CAPACITOR 50V 47P	1	
C6039		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C6040		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6041		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C6042		ECQM1H122JV	P.CAPACITOR 50V 1200P	1	
C6043,44		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6047		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6052,53		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6056		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6057		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6058-61		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C6062,63		ECCF1H180KC	C.CAPACITOR 50V 18P	2	
C6064,65		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6066-69		ECKF1H102KB	C.CAPACITOR 50V 1000P	4	
C6070,71		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	2	
C6072,73		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C6077		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6078		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6079		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6080,81		ECCP1H331J	C.CAPACITOR 50V 330P	2	
C6082		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D6001,02	MA165	DIODE	2	<R>
D6003	RD10FB	ZENER 10V	1	<R>
D6004-18	MA165	DIODE	15	<R>
D6021-43	MA165	DIODE	23	<R>
D6056,57	MA165	DIODE	2	<R>
DA6001	DAN401	DIODE	1	<R>
IC6001	UPD1512AC154	IC	1	<R>
IC6002	UPC339C	IC	1	<R>
IC6003,04	PU3124	IC	2	<R>
IC6005	BA6238A	IC	1	<R>
IC6006,07	UPD4030BC	IC	2	<R>
IC6008	AN90B20	IC	1	<R>
IC6009	BA236B	IC	1	<R>
IC6010	UPD4069UBC	IC	1	<R>
IC6011	BA236B	IC	1	<R>
IC6012	UPC339C	IC	1	<R>
IC6013	UPD4013BC	IC	1	<R>
IC6014	BA236B	IC	1	<R>
IC6015	UPD4013BC	IC	1	<R>
IC6016	UPD4011BC	IC	1	<R>
IC6017	AN90B22	IC	1	<R>
IC6020	UPC393C	IC	1	<R>
IC6021	UPD4013BC	IC	1	<R>
L6001	VLQEL05F5R6K	COIL 5.6UH	1	
L6002	VLQEL05F221K	COIL 220UH	1	
L6003	VLQEL05F821K	COIL 820UH	1	
L6004	VLQEL05F220K	COIL 22UH	1	
P6001	VJP1236T	CONNECTOR(MALE) 9P	1	
P6002	VJP1237T	CONNECTOR(MALE) 10P	1	
P6003	VJP1230G	CONNECTOR(MALE) 3P	1	
P6004	VJP1231T	CONNECTOR(MALE) 4P	1	
P6005	VJP1232T	CONNECTOR(MALE) 5P	1	
P6006	VJP1231B	CONNECTOR(MALE) 4P	1	
P6007	VJP1234T	CONNECTOR(MALE) 7P	1	
P6008	VJP1230	CONNECTOR(MALE) 3P	1	
P6009	VJP1231T	CONNECTOR(MALE) 4P	1	
P6010	VJP1232R	CONNECTOR(MALE) 5P	1	
P6011	VJP1229	CONNECTOR(MALE) 2P	1	
P6012	VJP1230T	CONNECTOR(MALE) 3P	1	
P6013	VJP1231R	CONNECTOR(MALE) 4P	1	
P6014	VJP1229T	CONNECTOR(MALE) 2P	1	
Q6001	2SC3311	TRANSISTOR	1	(Q,R)<R>
Q6002	2SD636	TRANSISTOR	1	(Q,R)<R>
Q6003	2SB644	TRANSISTOR	1	(Q,R)<R>
Q6004-18	2SD636	TRANSISTOR	15	(Q,R)<R>
Q6019	2SC1047	TRANSISTOR	1	(C,D)<R>
Q6020	2SD639	TRANSISTOR	1	(Q,R)<R>
Q6021	2SD973	TRANSISTOR	1	(Q,R)<R>
Q6022	2SB793	TRANSISTOR	1	(Q,R)<R>
Q6023,24	2SD636	TRANSISTOR	2	(Q,R)<R>
Q6025	2SC1047	TRANSISTOR	1	(C,D)<R>
Q6026	2SD639	TRANSISTOR	1	(Q,R)<R>
Q6027	2SD973	TRANSISTOR	1	(Q,R)<R>
Q6028	2SB793	TRANSISTOR	1	(Q,R)<R>
Q6030,31	2SC2206	TRANSISTOR	2	(B,C)<R>
Q6033-36	2SD636	TRANSISTOR	4	(Q,R)<R>
Q6037,38	2SD1330	TRANSISTOR	2	(S,T)<R>

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR6009,10	UN1213	TRANSISTOR-RESISTOR	2	<R>
QR6011	UN1212	TRANSISTOR-RESISTOR	1	<R>
QR6012,13	UN1111	TRANSISTOR-RESISTOR	2	<R>
QR6014-16	UN1214	TRANSISTOR-RESISTOR	3	<R>
		RESISTORS		
R6001,02	ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R6003	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6004	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6005,06	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6007	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6008	ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6009	ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R6010	ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R6011	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6012	ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6013,14	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6015	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R6016,17	ERD50TJ181	C.RESISTOR 1/2W 180	2	
R6018,19	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R6020-23	ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R6024	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6025	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6026	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6027	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6028	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6029	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6030	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6031	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6032	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6033	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6034	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6035	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6036	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6037	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6038	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6039	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6040	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6041	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6042	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6043	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6044	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6045	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6046	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6047,48	ERG1ANJ101	M.RESISTOR 1W 100	2	
R6049	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6050	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6051	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6052-56	ERDS2TJ103	C.RESISTOR 1/4W 10K	5	
R6057	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6058	ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6059	EROS2CKF1803	M.RESISTOR 1/4W 180K	1	
R6060	ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R6061,62	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6063	EROS2CKF2403	M.RESISTOR 1/4W 240K	1	
R6064	EROS2CKG5602	M.RESISTOR 1/4W 56K	1	
R6065	ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R6066	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6067	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6068	EROS2CKG8202	M.RESISTOR 1/4W 82K	1	
R6069	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6070	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R6071,72	ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6073	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6074	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6075	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R6076	ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R6077,78	ERDS2TJ391	C.RESISTOR 1/4W 390	2	
R6079,80	ERDS2TJ100	C.RESISTOR 1/4W 10	2	
R6081	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6082	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6083	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6084,85		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6086		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6087		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6088		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R6089		ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
R6090		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6091,92		ERDS2TJ100	C.RESISTOR 1/4W 10	2	
R6093-95		ERDS2TJ153	C.RESISTOR 1/4W 15K	3	
R6096		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R6097		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6098		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R6099		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R6100		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6101		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6102		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R6103		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6104-06		ERDS2TJ153	C.RESISTOR 1/4W 15K	3	
R6107		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6108		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6109,10		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6111		ERDS2TJ334	C.RESISTOR 1/4W 330K	1	
R6112		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6113-15		ERDS2TJ153	C.RESISTOR 1/4W 15K	3	
R6116		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6117		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6118		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6119		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6120,21		ERDS2TJ273	C.RESISTOR 1/4W 27K	2	
R6122		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6123		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6124		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6125		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6126		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6127		ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R6128,29		ERDS2TJ105	C.RESISTOR 1/4W 1000K	2	
R6130		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6133		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6134		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6137		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6138,39		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R6149		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6150		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R6151-53		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R6154		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6155		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6156		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6157		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R6158		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
RA6001		EXBP85472J	COMBI R-R	1	
RA6002,03		EXBP84103J	COMBI R-R	2	
RA6004		EXBP84473J	COMBI R-R	1	
VR6001,02		EVN32CA00B23	V.RESISTOR	2	
VR6003,04		EVM31GA00B15	V.RESISTOR 100K	2	
X6001		VSX0128	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E70		VMP0903	SUPPORT	1	
E71		VSC1799	SHIELD PLATE	1	
	■	VEP06518A	INTERFACE C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CAPACITORS		
C6201,02		ECCF1H330JC	C.CAPACITOR 50V 33P	2	
C6204		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C6205		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C6206		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6207		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6208		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C6213		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C6214		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6215		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C6216		ECEA1VU470	E.CAPACITOR 35V 47U	1	
C6217		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C6218		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
CA6201-05		EXFP8102ZW	COMBI R-R	5	
D6203		MA165	DIODE	1	<R>
IC6201		UPD7811G56B	IC	1	<R>
IC6202		HD7406P	IC	1	<R>
IC6203		M51951BL	IC	1	<R>
L6201		VLQEL05F5R6K	COIL 5.6UH	1	
L6202		VLQ0067	COIL	1	
P6201		VJP1232T	CONNECTOR(MALE) 5P	1	
P6202		VJP1232G	CONNECTOR(MALE) 5P	1	
P6203		VJP1235T	CONNECTOR(MALE) 8P	1	
P6204		VJP1231T	CONNECTOR(MALE) 4P	1	
P6205		VJP1230T	CONNECTOR(MALE) 3P	1	
P6206		VJS1822	CONNECTOR(FEMALE) 34P	1	
P6207		VJP1232R	CONNECTOR(MALE) 5P	1	
P6208		VJP1229T	CONNECTOR(MALE) 2P	1	
P6209,10		VJP1229	CONNECTOR(MALE) 2P	2	
P6211		VJP1141	CONNECTOR(MALE) 2P	1	
Q6203		2SD636	TRANSISTOR	1	(Q,R)<R>
Q6205		2SD636	TRANSISTOR	1	(Q,R)<R>
QR6201-11		UN1211	TRANSISTOR-RESISTOR	11	<R>
QR6212		UN1114	TRANSISTOR-RESISTOR	1	<R>
QR6213,14		UN1213	TRANSISTOR-RESISTOR	2	<R>
			RESISTORS		
R6201-20		ERDS2TJ103	C.RESISTOR 1/4W 10K	20	
R6221		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6222		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6227		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R6228		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6229		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6230		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R6233-36		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R6237		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6238		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6239		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6245		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6247		ERQ12HJ2R7	F.RESISTOR 1/2W 2.7	1	
R6268		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6269		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6270		ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R6271		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6272-74		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R6276		ERQ12HJ330	F.RESISTOR 1/2W 33	1	
R6277-79		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
RA6201		EXBP86103J	RESISTOR&RESISTOR 10K	1	
RA6202		EXBP88103J	COMBI R-R 10K	1	
RA6203		EXBP86103J	RESISTOR&RESISTOR 10K	1	
X6201		VSX0178	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E72		TJC6319	FUSE HOLDER	2	<!><R>
E73		VSB0036	HOUR METER	1	<M><R>
	■	VEP06519A	34P CONNECTOR C.B.A.		
P6404		VJS1822	CONNECTOR(FEMALE) 34P	1	
P6409		VJS1327	CONNECTOR(FEMALE) 34P	1	
			MISCELLANEOUS		
E93		VMX0674	34P SPACER	1	
	■	VEP06322D	KEY BOARD C.B.A.		
			CAPACITORS		
C6901		ECEA0JU102	E.CAPACITOR 6.3V 1000U	1	
C6903,04		ECCF1H680JC	C.CAPACITOR 50V 68P	2	
C6905,06		ECEA0JU102	E.CAPACITOR 6.3V 1000U	2	
C6907		ECQB1H472JB	P.CAPACITOR 50V 4700P	1	
C6908		ECEA1HK100	E.CAPACITOR 50V 10U	1	
C6909,10		ECEA0JU102	E.CAPACITOR 6.3V 1000U	2	
D6901,02		MA165	DIODE	2	<R>
D6903		MA166	DIODE	1	<R>
D6904		MA4091	DIODE	1	<R>
D6905		MA4330	DIODE	1	<R>
D6906-35		MA165	DIODE	30	<R>
D6936,37		LN440YCPUVT	DIODE	2	<R>
D6938-41		LN31GCPHLG3	DIODE	4	<R>
FL6901		VSL0081	DISPLAY TUBE	1	<R>
IC6901		UPC339C	IC	1	<R>
IC6902		UPD1511AC116	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6302		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6303		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6304		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6305,06		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6307		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R6308		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6309		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
VR6301,02		EVN38CA00B14	V.RESISTOR 10K	2	
VR6303,04		EVN38CA00B24	V.RESISTOR 20K	2	
VR6305-08		EVJL3AP20B14	V.RESISTOR 10K	4	
VR6309		EVU023320B53	V.RESISTOR 5K	1	
VR6310		EVJL3AP20B15	V.RESISTOR 100K	1	
			MISCELLANEOUS		
E80		VMP0913	VR PANEL	1	
	■	VEP08128A	CHROMINANCE C.B.A.		
			CAPACITORS		
C8001		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8002		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8003-05		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8006		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8007-09		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8010		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8012-15		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C8016		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8017,18		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8019		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8020		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8021-25		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C8026		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8027-29		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8030		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8031		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8032		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C8033		ECCF1H050DC	C.CAPACITOR 50V 5P	1	
C8034		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C8035		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8036		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C8037,38		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C8039		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8040		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C8041		ECQV1H274JZ	P.CAPACITOR 50V 0.27U	1	
C8042		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8043		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8044		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8045		ECCF1H090DC	C.CAPACITOR 50V 9P	1	
C8046		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8047		ECQM1H392JV	P.CAPACITOR 50V 3900P	1	
C8048		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8049		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8050		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8051,52		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8053		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8054		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C8055		ECCF1H050DC	C.CAPACITOR 50V 5P	1	
C8056		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C8057		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8058		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C8059,60		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C8061		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8062		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C8063		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8064		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8065		ECQV1H124JZ	P.CAPACITOR 50V 0.12U	1	
C8066		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8067		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8068		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C8069-71		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8072		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8073		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8074		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8075-89		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	15	
C8090		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8091		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8092		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8093-95		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8096		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8097-99		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8100		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8101		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8102		ECKF1H332KB	C.CAPACITOR 50V 3300P	1	
C8103		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8104		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8105		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8106		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8107		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8108		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8109-11		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8112		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8113-15		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8116		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8117		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8118,19		ECKF1H271KB	C.CAPACITOR 50V 270P	2	
C8120		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8121		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8122		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8123		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8124		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8125		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8126		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8127		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C8128		ECEA1CN101S	E.CAPACITOR 16V 100U	1	
C8129-31		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8132		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8133		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8134,35		ECKF1H271KB	C.CAPACITOR 50V 270P	2	
C8136		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8137		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8138		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8139		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8140		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8141		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C8142		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8143-46		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	4	
C8147-50		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C8151,52		ECCF1H330JC	C.CAPACITOR 50V 33P	2	
C8153		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8154		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C8155		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8156		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C8157		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C8158		ECQM1H392JV	P.CAPACITOR 50V 3900P	1	
C8159		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C8160		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8161		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C8162		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C8163		ECKF1H471KB	C.CAPACITOR 50V 470P	1	
C8164		ECKF1H821KB	C.CAPACITOR 50V 820P	1	
C8165		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C8166-68		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8169		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8170-75		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	6	
C8176		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C8177		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8178-84		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	7	
C8185		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8186-88		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC6903,04		AN6873N	IC	2	⟨R⟩
L6901		VLQEL05F100K	COIL 10UH	1	
L6902		VLQ0197	COIL	1	
L6903		VLQ0068	COIL	1	
P6901		VJP1876T	CONNECTOR(MALE) 5P	1	
P6902		VJP1873T	CONNECTOR(MALE) 2P	1	
P6903		VJP1877T	CONNECTOR(MALE) 6P	1	
P6904		VJP1876T	CONNECTOR(MALE) 5P	1	
P6905		VJP1873T	CONNECTOR(MALE) 2P	1	
P6906		VJP1877T	CONNECTOR(MALE) 6P	1	
P6907		VJP1879T	CONNECTOR(MALE) 8P	1	
P6908		VJP1875T	CONNECTOR(MALE) 4P	1	
Q6901		2SC3811	TRANSISTOR	1	(Q,R)⟨R⟩
Q6902,03		2SB643	TRANSISTOR	2	(Q,R)⟨R⟩
Q6905		2SB643	TRANSISTOR	1	(Q,R)⟨R⟩
Q6908,09		2SB643	TRANSISTOR	2	(Q,R)⟨R⟩
Q6910		2SD973	TRANSISTOR	1	(S)⟨R⟩
Q6911-17		2SD638	TRANSISTOR	7	(R,S)⟨R⟩
Q6920		2SD643	TRANSISTOR	1	(Q,R)⟨R⟩
			RESISTORS		
R6901-03		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R6904		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6905		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6906		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R6907		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6908		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R6909		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6910		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6911		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6912		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6913,14		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6915,16		ERDS2TJ821	C.RESISTOR 1/4W 820	2	
R6917		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6918		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R6921,22		ERDS2TJ471	C.RESISTOR 1/4W 470	2	
R6923		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6924		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R6925-29		ERDS2TJ390	C.RESISTOR 1/4W 39	5	
R6930		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6931		ERDS2TJ180	C.RESISTOR 1/4W 18	1	
R6932,33		ERDS2TJ220	C.RESISTOR 1/4W 22	2	
R6934		ERDS2TJ390	C.RESISTOR 1/4W 39	1	
R6936-39		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R6940-43		ERDS2TJ390	C.RESISTOR 1/4W 39	4	
R6946		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6947,48		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R6949-53		ERDS2TJ102	C.RESISTOR 1/4W 1K	5	
R6955		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6956		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
RA6901		EXBP84472J	RESISTOR&RESISTOR 4.7K	1	
RA6902		EXBP84333J	RESISTOR&RESISTOR 33K	1	
RA6903		EXBP88152J	COMBI R-R	1	
SW6901		VSP0213	SWITCH	1	⟨R⟩
SW6902		VSP0198	SWITCH	1	⟨R⟩
SW6903		VSP0194	SWITCH	1	⟨R⟩
SW6904		VSP0204	SWITCH	1	⟨R⟩
SW6905		VSP0195	SWITCH	1	⟨R⟩

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW6906		VSP0196	SWITCH	1	<R>
SW6907		VSP0197	SWITCH	1	<R>
SW6908		VSP0193	SWITCH	1	<R>
SW6909,10		VSP0199	SWITCH	2	<R>
SW6911		VSP0214	SWITCH	1	<R>
SW6912		VSP0215	SWITCH	1	<R>
SW6916,17		VSP0200	SWITCH	2	<R>
SW6918		VSP0203	SWITCH	1	<R>
SW6919		VSP0202	SWITCH	1	<R>
SW6920		EVQQJ104K	SWITCH	1	<R>
SW6921		VSS0119	SWITCH	1	<R>
SW6922		ESD14185	SWITCH	1	<R>
SW6923,24		ESD14184	SWITCH	2	<R>
SW6925		ESD14185	SWITCH	1	<R>
SW6926		ESD14184	SWITCH	1	<R>
T6901		VLT0275	TRANSFORMER	1	
X6901		VSX0128	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E74		VJF0344	DISPLAY TUBE HOLDER (R)	1	
E75		VJF0345	DISPLAY TUBE HOLDER (L)	1	
E76		KL04	LED SPACER	2	
E78		VMX0473	LED SPACER	2	
	■	VEP06426B	FRONT PANEL C.B.A.		INCLUDING THE
					VIDEO VR C.B.A.
					(VEP00J59B)
			CAPACITORS		
C6301		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6302-05		ECEA1CP2100	E.CAPACITOR 16V 10U	4	
IC6301		UPD4066BC	IC	1	<R>
P6301		VJP1242G	CONNECTOR(MALE) 2P	1	
P6302		VJP1244R	CONNECTOR(MALE) 4P	1	
P6303		VJP1244G	CONNECTOR(MALE) 4P	1	
P6304		VJP1244T	CONNECTOR(MALE) 4P	1	
P6305		VJP1246T	CONNECTOR(MALE) 6P	1	
P6306		VJP1242T	CONNECTOR(MALE) 2P	1	
P6308		VJP1242R	CONNECTOR(MALE) 2P	1	
P6309		VJP1242G	CONNECTOR(MALE) 2P	1	
P6312		VJP1232T	CONNECTOR(MALE) 5P	1	
P6313		VJP1242B	CONNECTOR(MALE) 2P	1	
Q6301		2SB641	TRANSISTOR	1	(Q,R)<R>
QR6301,02		UN1213	TRANSISTOR-RESISTOR	2	<R>
			RESISTORS		
R6301		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8189		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C8190,91		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8192		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
D8001-12		MA165	DIODE	12	<R>
DL8001		VLD0154	DELAY	1	
DL8002		EFDHR124A13A	DELAY LINE	1	
DL8003		VLD0032	DELAY LINE	1	
DL8004		VLD0130	DELAY	1	
DL8005,06		VLD0161	DELAY	2	
DL8007		VLD0135	FILTER	1	
DL8008		VLD0032	DELAY LINE	1	
DL8009		VLF0303	FILTER	1	
DL8010,11		VLD0032	DELAY LINE	2	
FL8001,02		VLF0299	FILTER	2	
IC8001		AN614	IC	1	<R>
IC8002		MN4053B	IC	1	<R>
IC8003		BU3781F	IC	1	<R>
IC8004		MN74HC221	IC	1	<R>
IC8005		MN4053B	IC	1	<R>
IC8006		BA7001	IC	1	<R>
IC8007,08		VEPH04A	HIC	2	<R>
IC8009		MN74HC04	IC	1	<R>
IC8010		BA7001	IC	1	<R>
IC8011		MN4053B	IC	1	<R>
IC8012		BA7001	IC	1	<R>
IC8013		AN614	IC	1	<R>
IC8014		AN608P	IC	1	<R>
IC8015		AN614	IC	1	<R>
IC8016		AN608P	IC	1	<R>
IC8017		MN74HC221	IC	1	<R>
IC8018		MN4053B	IC	1	<R>
IC8019		AN614	IC	1	<R>
L8001		VLQEL05F101K	COIL 100UH	1	
L8002-04		VLQEL05F121K	COIL 120UH	3	
L8005,06		VLQEL05F101K	COIL 100UH	2	
L8007		VLQEL05F121K	COIL 120UH	1	
L8008		VLQEL05F470K	COIL 47UH	1	
L8009,10		VLQEL05F121K	COIL 120UH	2	
L8012		VLQEL05F121K	COIL 120UH	1	
L8013		VLQEL05F470K	COIL 47UH	1	
L8014		VLQEL05F121K	COIL 120UH	1	
L8015		VLQEL05F150K	COIL 15UH	1	
L8016		VLQEL05F331K	COIL 330UH	1	
L8017		VLQEL05R271J	COIL 270UH	1	
L8018		VLQEL05F121K	COIL 120UH	1	
L8019		VLQEL05F390K	COIL 39UH	1	
L8020		VLQEL05F470K	COIL 47UH	1	
L8021		VLQEL05F101K	COIL 100UH	1	
L8022		VLQEL05F121K	COIL 120UH	1	
L8023-28		VLQEL05F101K	COIL 100UH	6	
L8029		VLQEL05F471K	COIL 470UH	1	
L8030,31		VLQEL05F101K	COIL 100UH	2	
L8032		VLQEL05F471K	COIL 470UH	1	
L8033		VLQEL05F121K	COIL 120UH	1	
L8034		VLQEL05F681K	COIL 680UH	1	
L8035		VLQEL05F680K	COIL 68UH	1	
L8036		VLQEL05F270K	COIL 27UH	1	
L8037		VLQEL05F121K	COIL 120UH	1	
L8038		VLQEL05F101K	COIL 100UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P8001	VJP1230R	CONNECTOR(MALE) 3P	1	
P8002	VJP1229T	CONNECTOR(MALE) 2P	1	
P8003	VJP1233T	CONNECTOR(MALE) 6P	1	
P8004	VJP1237T	CONNECTOR(MALE) 10P	1	
P8005	VJP1231T	CONNECTOR(MALE) 4P	1	
P8006	VJP1230T	CONNECTOR(MALE) 3P	1	
P8007	VJP1232G	CONNECTOR(MALE) 5P	1	
P8008	VJP1232R	CONNECTOR(MALE) 5P	1	
P8009	VJP1232T	CONNECTOR(MALE) 5P	1	
P8010	VJP1229T	CONNECTOR(MALE) 2P	1	
P8011	VJP1229	CONNECTOR(MALE) 2P	1	
Q8001,2	2SD636	TRANSISTOR	2	(Q,R)<R>
Q8004-09	2SD636	TRANSISTOR	6	(Q,R)<R>
Q8010	2SB643	TRANSISTOR	1	(Q,R)<R>
Q8011-15	2SD636	TRANSISTOR	5	(Q,R)<R>
Q8016	2SC2206	TRANSISTOR	1	(B,C)<R>
Q8017-19	2SD636	TRANSISTOR	3	(Q,R)<R>
Q8020	2SB641	TRANSISTOR	1	(Q,R)<R>
Q8021,22	2SD636	TRANSISTOR	2	(Q,R)<R>
Q8023	2SK301P	TRANSISTOR	1	<R>
Q8024	2SB641	TRANSISTOR	1	(Q,R)<R>
Q8025-36	2SD636	TRANSISTOR	12	(Q,R)<R>
QR8001-04	UN1212	TRANSISTOR-RESISTOR	4	<R>
QR8006	UN1213	TRANSISTOR-RESISTOR	1	<R>
QR8007,08	UN1212	TRANSISTOR-RESISTOR	2	<R>
QR8009-11	UN1213	TRANSISTOR-RESISTOR	3	<R>
QR8012	UN1212	TRANSISTOR-RESISTOR	1	<R>
QR8013,14	UN1213	TRANSISTOR-RESISTOR	2	<R>
QR8015,16	UN1212	TRANSISTOR-RESISTOR	2	<R>
QR8017	UN1213	TRANSISTOR-RESISTOR	1	<R>
		RESISTORS		
R8001	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8002	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8003	ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R8004	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8005	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8006	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R8007	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8008	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8009	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8010	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8011,12	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8013,14	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	2	
R8015	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8016	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8017	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8019	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R8020	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8021	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8022	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8023	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8024	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8025	ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R8026-28	ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R8029	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8030	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8031	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R8032-34	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	3	
R8035,36	ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R8037	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8038	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8039	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8040	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R8041	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R8042	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R8043	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8044,45	ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R8046	ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R8047	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8048	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8049	ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8050	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8051	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8052	ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R8053	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8054	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R8055	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8056	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8057	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R8058,59	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8060	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8061	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8062	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8063	ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8064	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8065	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8066	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8067	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8068	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8069	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8070	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8071	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8072	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8073	ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8074	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8075	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8076,77	ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R8078	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8079	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8080-85	ERDS2TJ102	C.RESISTOR 1/4W 1K	6	
R8086,87	ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R8088	ERQ12HJ330	F.RESISTOR 1/2W 33	1	
R8089	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8090	ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8091	ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8092	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8093	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8094-96	ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R8097	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8098	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8099	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8100	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8101,02	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8103	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R8104	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8105	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8106	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8107	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8108	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8109	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8110	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8111	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8112	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8113	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8114	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8115	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R8116	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8117	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8118	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8119	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8120	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8121	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8122	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8123	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8124	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8125	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8126	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8127	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8128,29	ERDS2TJ561	C.RESISTOR 1/4W 560	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8130		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8131		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8132		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8133		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8134,35		ERDS2TJ561	C.RESISTOR 1/4W 560	2	
R8136		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8137		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8138,39		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R8140		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8141		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R8142		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8143		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R8144		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8145		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8146		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8147		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8148,49		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8150		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8151,52		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R8153		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8154		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8155		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8156		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R8157		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8158		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8159		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8160		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8161		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R8162		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8163		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8164		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8165		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8166,67		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8168		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8169,70		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R8171		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8172,73		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R8174		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8175		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8176		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8177		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8178		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8179		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8180		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8181,82		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8183		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8184-87		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R8188		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8189		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8190		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8191		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8192		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R8193		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8194		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8195		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8196		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8197		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8198		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R8199		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8200		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8201		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8202		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8203		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8204,05		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R8206		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8207		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8208		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8209		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8210		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R8211-13		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	3	
R8214.15		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R8216		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8217		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R8218		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8219		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8220		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R8221,22		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
TH8001		ERTD2FHL102S	THERMISTOR 1K	1	
VR8001,02		EVM31GA00B13	V.RESISTOR 1K	2	
VR8003-06		EVM31GA00B23	V.RESISTOR 2K	4	
VR8007		EVM31GA00B24	V.RESISTOR 20K	1	
VR8008		EVM31GA00B13	V.RESISTOR 1K	1	
VR8009		EVM31GA00B23	V.RESISTOR 2K	1	
X8001,02		VSX0162	CRYSTAL OSCILLATOR	2	<R>
			MISCELLANEOUS		
E81		VMP0905	SUPPORT	1	
	■	VEP00L97A	CAP OVERRIDE C.B.A.		
P6408		VJP1243T	CONNECTOR(MALE) 3P	1	
	■	VEP00L95A	POCKET SW C.B.A.		
SW6681-84		VSS0126	SWITCH	4	<R>
SW6685		VSS0127	SWITCH	1	<R>
SW6686-88		VSS0126	SWITCH	3	<R>
SW6689		VSS0127	SWITCH	1	<R>
SW6690		VSS0126	SWITCH	1	<R>
	■	VEP00L96A	POCKET SW CONNECTION C.B.A.		
P6651		VJP1235T	CONNECTOR(MALE) 8P	1	
P6652		VJP1230T	CONNECTOR(MALE) 3P	1	
P6653		VJP1229T	CONNECTOR(MALE) 2P	1	
P6654		VJP1230R	CONNECTOR(MALE) 3P	1	
P6655		VJP1229	CONNECTOR(MALE) 2P	1	
P6656		VJP1230G	CONNECTOR(MALE) 3P	1	
	■	VEP00J60A	EJECT C.B.A.		
D6971-73		LN31GCPHLG3	DIODE	3	<R>
D6974		LN41YCPHLM	LED	1	<R>
D6975,76		LN31GCPHLG3	DIODE	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			RESISTORS		
R6971-74		ERDS2TJ220	C.RESISTOR 1/4W 22	4	
SW6971		EVQQJ104K	SWITCH	1	<R>
			MISCELLANEOUS		
E82		VMX0473	LED HOLDER	4	
E83		VGF0240	LED HOLDER	1	
	■	VEP00G66A	METER C.B.A.		
			CAPACITORS		
C6311		ECEA1CK100	E.CAPACITOR 16V 10U	1	
D6311-25		LN440YCPUVT	DIODE	15	<R>
P6307		VJP1875T	CONNECTOR(MALE) 4P	1	
P6310,11		VJP1873T	CONNECTOR(MALE) 2P	2	
			RESISTORS		
R6311-13		ERDS2TJ471	C.RESISTOR 1/4W 470	3	
R6314-16		ERDS2TJ331	C.RESISTOR 1/4W 330	3	
			MISCELLANEOUS		
E84		VGF0185	METER HOLDER	1	
E101		VMX0861	LED SPACER	15	
	■	VEK3381	FRONT CONNECTION C.B.A.		
P6801		VJP1231T	CONNECTOR 4P	1	
P6802		VJP1237T	CONNECTOR 10P	1	
P6803		VJP1231B	CONNECTOR 4P	1	
P6804		VJP1229B	CONNECTOR 2P	1	
P6805		VJP1229T	CONNECTOR 2P	1	
P6806,07		VJP1230T	CONNECTOR 3P	2	
P6808		VJP1231T	CONNECTOR 4P	1	
P6809,10		VJP1229T	CONNECTOR 2P	1	
P6811		VJP1229T	CONNECTOR 2P	1	
P6812		VJP1229B	CONNECTOR 2P	1	
P6813		VJP1229T	CONNECTOR 2P	1	
	■	VEP00F76A	FRONT JACK C.B.A.		
			CAPACITORS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6601		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C6602-04		ECEA1CKS100	E.CAPACITOR 16V 10U	3	
C6605-07		ECEA1CKS470	E.CAPACITOR 16V 47U	3	
C6608-10		ECEA1CKS100	E.CAPACITOR 16V 10U	3	
C6611		ECUM1H102KBN	CHIP 50V 1000P	1	
C6612		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C6613		ECUM1H102KBN	CHIP 50V 1000P	1	
C6614,15		ECEA1CKS470	E.CAPACITOR 16V 47U	2	
C6616		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C6617		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C6618		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C6628,29		ECEA1CKS470	E.CAPACITOR 16V 47U	2	
D6601-03		MA165	DIODE	3	<R>
IC6601		UPD4066BC	IC	1	<R>
IC6602		UPC4556C	IC	1	<R>
IC6603		TA7325P	IC	1	<R>
J6601,02		VJJ0084	MIC JACK	2	
J6603		VJJ0094	HEADPHONE JACK	1	
L6601		VLQEL05F102K	COIL 1000UH	1	
P6601		VJP1244T	CONNECTOR(MALE) 4P	1	
P6602		VJP1244G	CONNECTOR(MALE) 4P	1	
P6603		VJP1249T	CONNECTOR(MALE) 9P	1	
Q6601,02		2SD1330	TRANSISTOR	2	(R,S)<R>
Q6603-05		2SD636	TRANSISTOR	3	(Q,R)<R>
QR6601		UN1213	TRANSISTOR-RESISTOR	1	<R>
			RESISTORS		
R6601		ERJ6GEYJ393	CHIP 1/10W 39K	1	
R6602		ERJ6GEYJ683	CHIP 1/10W 68K	1	
R6603		ERJ6GEYJ393	CHIP 1/10W 39K	1	
R6604		ERJ6GEYJ683	CHIP 1/10W 68K	1	
R6605,06		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R6607		ERJ6GEYJ224	CHIP 1/10W 220K	1	
R6608,09		ERJ6GEYJ103	CHIP 1/10W 10K	2	
R6610		ERJ6GEYJ223	CHIP 1/10W 22K	1	
R6611,12		ERJ6GEYJ562	CHIP 1/10W 5.6K	2	
R6613		ERJ6GEYJ333	CHIP 1/10W 33K	1	
R6614		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R6615		ERJ6GEYJ561	CHIP 1/10W 560	1	
R6616		ERJ6GEYJ470	CHIP 1/10W 47	1	
R6617		ERJ6GEYJ101	CHIP 1/10W 100	1	
R6618		ERJ6GEYJ333	CHIP 1/10W 33K	1	
R6619		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R6620		ERJ6GEYJ561	CHIP 1/10W 560	1	
R6621		ERJ6GEYJ470	CHIP 1/10W 47	1	
R6622		ERJ6GEYJ101	CHIP 1/10W 100	1	
R6623,24		ERJ6GEYJ102	CHIP 1/10W 1K	2	
R6625		ERJ6GEYJ121	CHIP 1/10W 120	1	
R6626,27		ERJ6GEYJ102	CHIP 1/10W 1K	2	
R6628		ERJ6GEYJ121	CHIP 1/10W 120	1	
R6629		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R6631		ERJ6GEYJ334	CHIP 1/10W 330K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6632		ERJ6GEYJ821	CHIP 1/10W 820	1	
R6637		ERJ6GEYJ472	CHIP 1/10W 4.7K	1	
R6638		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R6639		ERJ6GEYJ474	CHIP 1/10W 470K	1	
R6640		ERJ6GEYJ821	CHIP 1/10W 820	1	
R6641		ERJ6GEYJ102	CHIP 1/10W 1K	1	
R6642.43		ERJ6GEYJ104	CHIP 1/10W 100K	2	
R6644		ERJ6GEYJ334	CHIP 1/10W 330K	1	
R6645		ERJ6GEYJ474	CHIP 1/10W 470K	1	
R6646,47		ERJ6GEYJ473	CHIP 1/10W 47K	2	
R6648		ERJ6GEYJ182	CHIP 1/10W 1.8K	1	
VR6601		EWKH1AY15B14	V.RESISTOR 10K	1	
	■	VEP00L91A	INPUT JACK C.B.A.		
			CAPACITORS		
C6401		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C6402		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C6403		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
L6401		VLQEL05F221K	COIL 220UH	1	
P6401		VJP1245T	CONNECTOR(MALE) 5P	1	
P6402		VJP1243T	CONNECTOR(MALE) 3P	1	
P6403		VJP1245T	CONNECTOR(MALE) 5P	1	
P6404		VJP1243G	CONNECTOR(MALE) 3P	1	
P6405		VJP1243B	CONNECTOR(MALE) 3P	1	
P6406		VJP1247T	CONNECTOR(MALE) 7P	1	
P6407		VJP1244T	CONNECTOR(MALE) 4P	1	
Q6401		2SD636	TRANSISTOR	1	(Q,R,S)<R>
			RESISTORS		
R6401		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R6402		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6403		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R6404		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6405,06		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
R6407		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
SW6401		VES0244	SWITCH	1	<R>
SW6402.03		ESD14339	SWITCH	2	<R>
SW6404		VES0244	SWITCH	1	<R>
	■	VEP00L92A	OUTPUT JACK C.B.A.		
			CAPACITORS		
C6501		ECEA1CPK470	E.CAPACITOR 16V 47U	1	
P6501		VJP1243R	CONNECTOR(MALE) 3P	1	
P6502,03		VJP1243G	CONNECTOR(MALE) 3P	2	
P6504		VJP1243B	CONNECTOR(MALE) 3P	1	
P6505		VJP1247T	CONNECTOR(MALE) 7P	1	
P6506		VJP1243T	CONNECTOR(MALE) 3P	1	
P6507		VJP1247T	CONNECTOR(MALE) 7P	1	
P6508		VJP1243T	CONNECTOR(MALE) 3P	1	
Q6501		2SD1330	TRANSISTOR	1	(S,T)<R>
			RESISTORS		
R6501		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6502		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R6503		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6504-06		ERDS2TJ750	C.RESISTOR 1/4W 75	3	
SW6501		VES0244	SWITCH	1	<R>
	■	VEP00L93A	S.VIDEO INPUT C.B.A.		
J6451		VJS2579	S-VIDEO CONNECTOR	1	
P6451		VJP1244T	CONNECTOR(MALE) 4P	1	
			RESISTORS		
R6451,52		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
	■	VEP00L94A	S.VIDEO OUTPUT C.B.A.		
J6450		VJS2579	S-VIDEO CONNECTOR	1	
P6450		VJP1244T	CONNECTOR(MALE) 4P	1	
	■	VEK3849	LAMP C.B.A.		
			MISCELLANEOUS		
E85		VLL0019	LAMP	2	<R>
	■	VEK3848	PHOTO TR UNIT		
E86		ECKW1H102KBN	C.CAPACITOR 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E87		PN150NV	PHOTO TRANSISTOR	1	<R>
			MISCELLANEOUS		
E88		VMD0091	PHOTO TR HOLDER	1	<R>
	■	VEK3832	PRESSURE ROLLER SOLENOID CONNECTOR C.B.A.		
P6701		VJP1232R	CONNECTOR(MALE) 5P	1	
P6702		VJP1231B	CONNECTOR(MALE) 4P	1	
P6703		VJP1233T	CONNECTOR(MALE) 6P	1	
P6704		VJP1230T	CONNECTOR(MALE) 3P	1	
P6705		VJP1233R	CONNECTOR(MALE) 6P	1	
P6706		VJP1148	CONNECTOR(MALE) 2P	1	
P6707		VJP1229B	CONNECTOR(MALE) 2P	1	
	■	VEM0256	ELEVATOR MOTOR UNIT		
P6511		VJP1245T	CONNECTOR(MALE) 5P	1	
P6512		VJP1242R	CONNECTOR(MALE) 2P	1	
P6513		VJP1242T	CONNECTOR(MALE) 2P	1	
			MISCELLANEOUS		
E89		MXN12AE10C	MOTOR	1	<!><R>
E90		VMA6848	ANGLE	1	

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